

*R. Ball of Surgeon*

**Fifty-Sixth Annual Report**  
OF THE  
**DIRECTOR OF PUBLIC HEALTH**  
OF THE  
**UNITED PROVINCES OF AGRA AND OUDH**  
*FOR THE YEAR ENDING 31ST DECEMBER, 1923*  
AND THE  
**TWENTY-NINTH REPORT**  
OF THE  
**SUPDG. ENGINEER, PUBLIC HEALTH DEPARTMENT,**  
*FOR THE YEAR ENDING 31ST MARCH, 1924.*



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**Fifty-Sixth Annual Report**  
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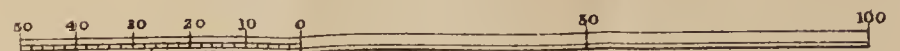


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# Map of the UNITED PROVINCES

Scale 1 Inch = 32 Miles, or 32 Kilometres.



## REFERENCES.

Province or State Boundary	—
District	—
Railways, open, 5-6" gauge	—
Do. do. 3-3½" do.	—
Do. do. 2-6" do.	—
Railways under construction, 5-6" gauge	—
Do. do. do. 3-3½" do.	—
Do. do. do. 2-6" do.	—
Railways, projected, 5-6" gauge	—
Do. do. do. 3-3½" do.	—
Do. do. do. 2-6" do.	—
No. 1	Chauke Jagir
" 2	Jhansi District
" 3	Hamirpur "
" 4	Banda "

From Nos. 1 to 6 railways projected or under consideration.  
From Nos. 7 to 18 surveys sanctioned.







[Prescribed maximum length—  
25 pages (foolscap size).]

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*Erratum slip to the Annual Report of the Director of Public Health,  
United Provinces, for 1923.*

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28	Firozabad	Pilibhit.	Firozabad	and Pilibhit.	In the 17th line of the 2nd sub-para. of paragraph 79.
30	Purposes	..	Purpose	..	In the 17th line from the top.
3A	Allotment	..	Allotments	..	In the 28th line from the top.
5A	Departments	..	Department	..	In the 13th line from the top.
5B	46·5	..	46·45	..	In column 10, sub-column "Total" against Naini Tal (no. 34).
7B	1 31..	..	1931	..	In column 3, sub-column "June" against Shahjahanpur (no. 15).
„	229 ..	..	2293	..	In column 3, sub-column "July" against Allahabad (no. 21).
„	1 36..	..	1036	..	In column 3, sub-column "August" against Unao (no. 38).
8B	5 6 ..	..	506	..	In column 3, sub-column "over one week" against Gonda (no. 44).
9B	8 8 ..	..	808	..	In column 3, sub-column "over one month and not exceeding six months" under "total" against Fatehpur (no. 20).
12B	179 0	..	17900	..	In column "population" sub-column Muhammadans under "female" against Banda (no. 25).
„	515 8	..	51563	..	In column "population" sub-column Muhammadans under "female" against Jaunpur (no. 28).
14B	108 2	..	10,832	..	In column 5, sub-column Hindus under "female" against Farrukhabad (no. 17).
18B	1805	..	1895	..	In column 7, "plague" against Benares (no. 26).
32B	6·10	..	·10	..	In column 15, sub-column "Ratio" against Jahangirabad (no. 17)
„	5 ..	..	55	..	In column 15, sub-column "deaths" against Sambhal no. 41).
36B	Paragraphs	..	Paragraphs	..	} On the top of page 36B.
„	85 ..	..	35	..	
41B	23 8..	..	2368	..	In column 5, sub-column "June" against Allahabad (no. 21).
„	12456	..	2456	..	In column 5, sub-column "September" against Moradabad (no. 14).
„	700 ..	..	760	..	In column 5, sub-column "October," against Rae Bareli (no. 39).
42B	249 ..	..	1249	..	In column 5, sub-column "May" against "Total for the province".
43B	Ma e	..	Male	..	In the heading of sub-column "male" of column 7.
„	·8 ..	..	·08	..	In column 7, sub-column "female" against Hardoi (no. 41).





# Fifty-sixth Annual Report of the Director of Public Health, United Provinces of Agra and Oudh, for the year ending the 31st December, 1923.

(Sections I, II, III, and IV are omitted in accordance with the orders of the Government of India, Home department, no. 9/257, dated the 4th September, 1873.)

## SECTION V.

### General population—Vital Statistics.

The birth and death rates shown in this report have been calculated on the population according to the census of 1921 (45,375,787). As stated in paragraph 1 of the Annual Sanitary Report for 1921, the recorded population in 1921 is less than the 1911 census figure as revised owing to territorial changes (viz., 46,805,913) by 1,430,126, while the "deduced population" exceeds the same by 1,127,035. The Superintendent of Census Operations, United Provinces, in paragraph 5 of his report, which is now out, would seem to confirm the statement made therein, that this difference in the two sets of figures is due to the under-reporting of deaths which usually takes place in the vital statistics. The estimated population worked out up to the half-year ending June, 1923 shows a further increase in population of 353,737 over the 1911 census figure.

2. A scheme proposing a better system of registration submitted by me is under the consideration of the Local Government.

Registration of vital statistics.

3. The birth-rate for the province for the year 1923 showed an increase of 3·87 over that of the preceding year and of 1·16 as compared with the quinquennial average—the rates for the two years and for the quinquennial period being 36·04, 32·17, and 34·88 per mille of the population, respectively. The provincial death-rate amounted to 23·37 as against 25·01 in 1922 and 45·17, the quinquennial average. The low death-rate is chiefly due to the low mortality recorded under the head "fever." The fall in the general mortality may to some extent be due to under-reporting, yet the low death-rate combined with the increased birth-rate clearly points to the healthiness of the year.

The birth and death-rates of 1923 compared with those of 1922 and the quinquennial period.  
(Statements I and II.)



The birth and death-rates and infantile mortality of the United Provinces compared with those of other provinces.

4. A comparative statement showing the birth, death, and the infantile mortality rates of the different provinces in India is appended:—

Province.				Birth-rate.	Death-rate.	Infantile mortality.
United Provinces	..	..	..	36·04	23·37	169·37
Bombay	..	..	..	35·57	25·89	159·75
Madras	..	..	..	33·13	22·16	173·67
Bengal	..	..	..	29·95	25·48	182·06
Bihar and Orissa	..	..	..	37·02	25·04	146·52
Assam	..	..	..	28·82	23·54	179·50
Central Provinces	..	..	..	45·63	30·53	220·29
Punjab	..	..	..	43·16	30·94	196·62
Burma	..	..	..	Information not received.		
North-West Frontier Province	..	..	..	27·62	23·74	149·50
Delhi	..	..	..	42·07	37·90	212·84

### BIRTHS.

5. The total number of births recorded during the year under report was 1,635,450, giving a birth-rate of 36·04 as against 1,459,788 and 32·17 in the preceding year.

Births and birth-rates.  
(Statement I.)

The quinquennial average was 34·88. As in last year, the highest birth-rate (3·95) was returned in October and the lowest (2·21) in June.

Proportion of male to female births.  
(Statement I.)

6. The proportion of males born to every 100 of females was 112·04 as against 111·48 in 1922.

7. The highest birth-rates were noticed in the districts of Bijnor, Moradabad, Pilibhit, Bulandshahr, and Jhansi and the lowest in those of Rae Bareli, Gonda, Dehra Dun, Ghazipur, and Jaunpur. (For further details, Statement I attached to the report may be referred to.)

The different birth-rates considered.  
(Statement I.)

8. During the year under report births exceeded deaths by 12·67 per 1,000 of the population. This excess showed an increase of 5·51 over the figure of the preceding year when it was 7·16. The excess was noticeable all over the province, except the two districts of Azamgarh and Naini Tal.

Excess of births over deaths.  
(Statement I.)

9. The total number of births registered in municipalities during 1923 was 133,415, yielding a ratio of 45·87 per 1,000 of the population, against 120,216 and 41·28 in the preceding year. Forty-four out of 85 municipalities recorded a birth-rate above, and 41 below, the provincial mean (45·87). Chandpur (Bijnor) with a birth-rate of 64·72 and Lakhimpur with 9·36 stood first and last, respectively.

Births and birth-rates in municipalities.

10. Taking the municipalities as a whole the birth-rate exceeded the death-rate by 9·64 during the year under report. The excess varied from 35·08 in Chandpur (Bijnor) to 1·70 in Mussoorie (Dehra Dun).

Excess of births over deaths in municipalities.



11. In 1923, 13,106 births were returned in notified areas against 11,212 in 1922, the birth-rates for the two years being 38·22 and 33·73, respectively. Twenty-six notified areas exhibited a birth-rate above, and 21 below, the provincial mean, the birth and death rates in Mainpuri Civil station being the same. Among the notified areas returning high birth-rates Aonla (Bareilly) with a rate of 65·26 was most conspicuous. The lowest birth-rate (2·62) was noticed in Rikhikesh (Dehra Dun), where the circumstances are peculiar.

12. Taking the notified areas as a whole the birth-rate exceeded the death-rate by 9·66 during the year under report. The excess was most marked in Muhamdi (Kheri) where it amounted to 29·07.

### DEATHS.

13. The total number of deaths recorded during the year under report amounted to 1,060,304, of which 566,807 were males and 493,497 females, the resulting rates being 23·37, 23·83, and 22·86, respectively. The corresponding rates for the preceding year were 25·01, 25·64, and 24·31 and the average rates for the previous quinquennium 45·17, 45·33, and 44·99, respectively.

14. Twenty-six districts returned the mortality higher, and 22 lower, than the provincial average (23·37). Hamirpur with a death-rate of 38·59 stood first and (as in 1922) Gonda, with a death-rate of 12·78, was the last. (For further details see Statement II.)

15. In 1923 the provincial death-rate for municipal towns was 36·23 per mille of the population as compared with 33·65 of the preceding year, the actual numbers of deaths registered during the two years being 105,396 and 97,979, respectively. In 35 municipalities the death-rate was higher, and in 50 lower, than the provincial average for municipal towns. Ghaziabad with a death-rate of 67·89 stood first. Then in order of high mortality came Banda (59·21) and Brindaban (55·70). In Ghaziabad and Banda the high death-rates were chiefly due to plague and fever, while in Brindaban to fever.

The lowest death-rates were recorded in Lakhimpur (6·94), Mussoorie (13·50), and Mainpuri (14·35). In Lakhimpur registration is defective and the local authorities are taking action to improve it.

16. Compared with the preceding year, notified areas showed an excess of 1,346 deaths during the year under report, the figures for the two years being 9,793 and 8,447 with death-rates of 28·56 and 25·41, respectively. Twenty-one notified areas out of 48 returned a death-rate above, and 27 below, the provincial average (28·56). Pilkhua (Meerut) returned the highest death-rate (64·79). Rath (Hamirpur) followed with 52·18 and Anupshahr (Bulandshahr) with 46·27. The high death-rate in Pilkhua was due to plague and fever, in Rath to respiratory diseases, all other causes and fever, and in Anupshahr to fever. The lowest mortality was noticeable in



Mainpuri Civil station (2·97), Ramnagar in the Naini Tal district (5·15), and Bilgram in the Hardoi district (5·93).

17. According to months the highest death-rate from all causes (2·25) occurred in October and the lowest (1·68) to season. in August. (For further details see Statement III.)  
(Statement III.)

18. During 1923 the mortality among male infants under one month Mortality by sexes was 78,146 and among female infants 65,155, that at different age-pe- between one to six months 45,837 and 38,989, and riods. that between seven to twelve months 26,584 and 22,283, respectively, making the total mortality under one year 276,994 (150,567 males and 126,427 females). The total mortality under all ages amounted to 566,807 among males and 493,497 among females, the death-rates being 23·83 and 22·86, respectively. The corresponding figures for 1922 were 610,033 and 524,847, 25·64 and 24·31, respectively. (For further details see Statement IV.)

19. The following table shows the deaths and death-rates among infants calculated on the births of the year for a series of years :—  
Infantile mortality.

Year.	Births.			Deaths of infants.			Death-rates of infants.		
	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
Decennial average (1901—1910).	1,027,110	949,374	1,976,484	263,635	240,436	504,071	256·7	253·3	255·0
1911 ..	1,063,243	935,076	2,053,324	271,575	233,771	505,346	254·2	237·3	246·1
1912 ..	1,105,707	1,019,378	2,125,535	236,323	202,694	439,022	213·7	198·7	206·5
1913 ..	1,160,280	1,072,719	2,232,999	275,223	237,675	512,903	237·2	221·6	229·7
1914 ..	1,094,342	1,009,712	2,104,554	260,739	230,603	491,347	233·1	228·4	233·5
1915 ..	1,060,779	975,342	2,036,121	222,603	195,095	417,698	209·8	200·0	205·1
1916 ..	1,050,532	967,224	2,017,756	224,735	198,395	423,130	213·9	205·1	209·7
1917 ..	1,122,101	1,035,541	2,157,642	247,104	218,363	465,467	220·2	210·9	215·7
1918 ..	977,044	890,800	1,867,844	301,236	265,597	566,833	308·3	293·1	303·5
1919 ..	795,870	720,627	1,516,497	201,368	182,720	384,088	253·0	253·6	253·3
1920 ..	872,094	792,098	1,664,192	194,722	171,815	366,537	223·3	216·9	220·2
Decennial average (1911—1920).	1,030,750	946,901	1,977,651	243,564	213,673	457,237	237·2	227·1	232·3
1921 ..	819,354	740,743	1,560,602	197,223	171,908	369,131	240·6	232·1	236·5
1922 ..	769,516	690,272	1,459,788	145,923	122,334	268,312	189·6	177·3	183·8
1923 ..	834,154	771,296	1,635,450	150,567	126,427	276,994	174·2	163·9	169·4

A further fall in the provincial infantile mortality occurred during the year under report, the infantile death-rate being 169·37 as compared with 183·8 in the preceding year and 232·3, the average for the decennium (1911—20).

The largest number of deaths were due to fevers and the lowest to cholera. Out of 2,083 deaths reported as due to tetanus in certain cities having medical officers of health, from which information has been received, 1,874 were verified by these officers. Out of this 1,423 or 76 per cent. of the number verified were found as actually due to this cause. The medical officers of health of Naini Tal, Aligarh, Bareilly, Dehra Dun, Hathras, and Hardwar state that no deaths from tetanus were reported during the year, while in Mussoorie only one death and in Agra and Meerut



each two deaths were reported. This is probably incorrect and the medical officers of health concerned will be addressed on the subject.

20. The infant mortality rate for the districts during 1923 was lower than that of the preceding year, being 169·37 as compared with 183·80. The mortality among male infants was higher (174·24) than that among the females (163·91). Twenty-four districts recorded death-rates above, and 24 below, the provincial average. Hamirpur returned the highest mortality among infants (256·92) which was chiefly due to respiratory diseases. It was followed by Cawnpore with 223·53, Naini Tal with 221·67, and Jhansi with 221·60. The high mortality in Cawnpore was due to other causes and malaria, in Naini Tal to malaria, and in Jhansi to other causes, malaria, exhaustion, and malnutrition. The lowest infantile mortality rates were recorded in Gorakhpur (107·69), Rae Bareilly (121·12), Almora (121·13), and Muttra (122·81).

21. Unlike the districts, the death-rate among infants for the municipal area was higher in 1923 than that for 1922, the rates for the two years being 267·01 and 257·23, respectively. This is no doubt due to better registration. Twenty-nine municipalities showed the infantile mortality higher, and 56 lower, than the provincial average. As usual Cawnpore topped the list with a rate of 495·17 and was followed by Etawah and Mau with 372·04 and 368·58, respectively. The high infantile death-rate in Cawnpore was reported to be due to fevers, in Etawah to tetanus and convulsions and other causes, and in Mau to malaria and respiratory diseases. In order to improve the health conditions of infants the municipal board of Cawnpore have resolved to entertain one health visitor and two *dhais* at two maternity centres. The lowest infantile mortality rates were recorded in Ghazipur (150·86), Ballia (151·51), and Gonda (151·72).

22. The infantile mortality recorded in 48 notified areas during the year under report was 227·30 as compared with 227·97 in the preceding year. In 19 notified areas the infant death-rate was above, and in 29 below, the provincial mean. Madhoganj (Hardoi) headed the list with a high infantile death-rate of 377·78 and was followed by Rath with a rate of 371·77 and Pilkhua of 344·12. No death under one year was recorded in Rikhikesh during the year. The notified areas exhibiting a very marked low infant mortality were Haldwani in Naini Tal district (43·48), Karwi in the Banda district (74·38), Gaura Barhaj in Gorakhpur district (78·03) and Gorakhpur (95·24).

23. In 1923 the infant mortality rate per mille of births in the urban areas was 263·91 and in the rural tracts 160·77 as compared with 254·83 and 177·33, respectively, in the preceding year.

(Statement VIa.)

24. Like the preceding two years, the incidence of mortality among children under one year of age was highest in October during the year under review and lowest in March, the figures for these months being 31,222 and 16,350, respectively.

Seasonal infantile mortality.



25. According to class the death-rate in order of high mortality was  
 Mortality according to class for Muhammadans 23·81, Hindus 23·54, other classes 4·32, and Christians 3·40, the corresponding rates for the preceding year being 23·13, 25·59, 4·80, and 3·49, respectively. (For further details see Statement V.)

26. The general mortality in rural tracts was 22·48 and that in urban areas 35·86 as compared with 24·45 and 32·93 in 1922 and 44·86 and 49·07, the average for the previous 5 years, respectively.

27. With the increase in the number of births during the year under report, as compared with last year, still-births also rose from 14,242 to 15,388. As usual the highest number of still-births (2,726) was recorded in Gorakhpur. Sitapur and Azamgarh were the next two highest with 1,329 and 1,098 still-births. Mainpuri, which returned no still-births during the years 1917 to 1921 and only seven in the preceding year, reported none in 1923 also. The attention of the district mortuary registrar will be drawn to this.

Two still-births were registered in Sultanpur, five in Ghazipur, and nine in Jalaun. Still-births are not included in any of the statements appended to the report (vide note at foot of the annual form no. II).

#### REGISTRATION AND VERIFICATION OF VITAL STATISTICS.

28. Returns embodying the results of the verification of deaths which occurred within the limits of the practice of Government medical officers as well as in the medical institutions, the causes of which were verified by Civil Surgeons and their subordinates, were, as usual, received during the year under review. The scheme for largely extending the verification of the causes of deaths by Government agency, which was reported to be under the consideration of Government in the last year's report, was not accepted by Government.

Altogether 3,030 deaths were verified. Of these, the majority (2,006) was due to all other causes. Pneumonia claimed 265, dysentery 194, tubercle of the lungs 176, malaria 71, other tubercular diseases 64 and tetanus 39. The number of deaths due to other diseases ranged between 6 (rheumatic fever and rheumatism) and 35 (all other infective diseases). Only one death was returned from scurvy and relapsing fever each, two from small-pox, four from kala-azar, and none from beri beri. Of the 3,030 deaths, 400 were among children, 1,875 among adults from 16 to 45 years of age, and 755 among adults from 46 years of age and upwards.

29. In 1923, 8,669 entries (4,224 births and 4,445 deaths) were tested as by the Assistant Directors of Public Health.

30. During 1923 the local authorities tested 164,205 birth and 117,654 death entries or a total of 281,859 against 275,079 in 1922. The percentage of omissions discovered in registration is worked out to 3·89 as regards births and 2·94 as regards deaths, as compared with 3·81 and 2·83,



respectively, in the preceding year. The largest number of entries (31,284) was tested in the Gorakhpur district. Then followed Jhansi with 22,621, Gonda with 21,152, Bahraich with 21,072, and Basti with 17,919. Muttra, Ghazipur, Garhwal, Dehra Dun, and Cawnpore returned the lowest number of entries tested. No entries were tested in the districts of Etah and Bijnor. The attention of the district officers concerned will be drawn to the low number of entries tested.

31. During the year under report the total number of birth and death entries tested by the vaccination staff was 952,088 (533,561 births and 398,527 deaths) against 968,622 in the previous year. The district of Gorakhpur stood first with 66,452, followed by Hardoi (55,647) and Azamgarh (35,457). The number of entries tested was below the provincial average (19,835) in 25 districts. Among those showing the lowest number of entries tested were Dehra Dun (3,106), Sultanpur (7,179), and Fyzabad (7,396).

32. During the year under report 2,667 persons were fined for neglect in complying with registration rules, and the total amount so realized was Rs. 877 as compared with 2,059 and Rs. 648, respectively, in the preceding year.

33. The statistical returns were received very late from the districts of Allahabad, Fyzabad, Lucknow, Bulandshahr, Shah-jahanpur, Agra, and Basti. The attention of the district mortuary registrars concerned will be drawn to the matter.

## SECTION VI.

## History of the chief diseases.

34. A table showing the death-rates per mille of the population from the most important diseases for 1923 and 1922 and the average death-rates for the preceding 10 years is appended below :—

Chief causes of mortality.	Death-rate per mille for 1922.	Death-rate per mille for 1923.	Average death-rate for preceding 10 years (1913—22).	Increase or decrease as compared with 1922.	Increase or decrease as compared with decennial average.
Cholera .. ..	·05	·06	1·29	+·01	—1·23
Small-pox .. ..	·01	·02	·11	+·01	—·09
Plague .. ..	·51	1·63	1·52	+1·12	+·11
Fever .. ..	20·04	17·19	29·83	—2·85	—12·64
Dysentery and diarrhoea ..	·23	·24	·37	+·01	—·13
Respiratory diseases ..	·56	·57	·58	+·01	—·01
Injuries .. ..	·45	·48	·53	+·03	—·05
All other causes ..	3·16	3·17	4·90	+·01	—1·73
All causes .. ..	25·01	23·37	39·16	—1·64	—15·79

It will be seen that in 1923 death-rates from all causes and fever show a marked decrease, as compared with 1922, while slight increases are noticeable under all other heads.

## CHOLERA.

35. During the year under report cholera was responsible for 2,591 deaths, giving a ratio of ·06 per mille of the population against 2,330 and ·05 in 1922. The mean for the previous five years was 72,012, a ratio of 1·56, and for the previous 10 years 54,039, a ratio of 1·29. The largest number of deaths (1,064) occurred in September and the smallest (1) in December.

36. In nine districts the mortality from cholera was above the average for the province (·06). Ballia occupied the first place with a rate of ·62, and was followed by Naini Tal (·43), Aligarh (·32), and Ghazipur (·24). Four districts, namely, Muzaffarnagar, Hamirpur, Fatehpur, and Bahraich, enjoyed complete immunity, while in ten the number of deaths was too small to yield a ratio of ·01 per mille.

The twenty plains districts under the cholera scheme returned 1,399 deaths against 1,192 returned by the remaining 28 districts. The annual average number of deaths for the two classes of districts for the 10 years that the scheme has been in operation was respectively 37,451 and 16,588, giving a percentage of 69 and 31 to total number of cholera deaths in the province. These figures are satisfactory compared to those for the six years (1908—13) immediately prior to the inauguration of the scheme during which the averages were 52,200 and 15,273 and the percentages 77 and 23, respectively, for the two sets.



All the 20 districts were adequately supplied with potassium permanganate, of which about 4 tons were distributed during the year under report.

In the last year's report mention was made of a special anti-cholera scheme in the Garhwal district, but as there was practically no cholera in the district the efficacy of the working of the scheme could not be tested.

37. Of the 89 towns, 45 were free from the disease, while in 16 the rates were higher than the provincial average ( $\cdot 17$ ).  
 Cholera in towns. The highest death-rate was returned by Firozabad  
 (Statement VI B.) ( $5\cdot 40$ ), followed by Ballia ( $3\cdot 40$ ).

38. During 1923 the provincial death-rate from cholera was  $\cdot 17$  in the urban areas and  $\cdot 05$  in the rural tracts, as compared with  $\cdot 05$  for both the areas in the preceding year.  
 Urban and rural mortality from cholera. (Statement VI.)

### SMALL-POX.

39. Seven hundred and forty-seven deaths from small-pox were recorded in 1923 against 242 in 1922. The death-rates for the two years were  $\cdot 02$  and  $\cdot 01$  and the average for the past five years  $\cdot 09$ . Two hundred and thirty-four deaths occurred among children under one year of age and 317 between the ages one to ten years.  
 Deaths and death-rates from small-pox in districts and towns (Statements VIII and VIB.)

The highest number of deaths (254) occurred in June and the lowest (9) in January. As in last year, the largest number was returned from the Allahabad district with a death-rate of  $\cdot 16$ . Seven districts were entirely free from the disease, while in 18 the rates were below  $\cdot 01$  per mille.

Of the 89 towns having a population of 10,000 and upwards only 37 were affected.

40. The mortality from small-pox in the urban areas was  $\cdot 16$  and in the rural tracts  $\cdot 01$  against  $\cdot 01$  and nil in 1922.  
 Urban and rural mortality from small-pox. (Statement VI.)

### PLAGUE.

41. Altogether 74,187 deaths were reported from plague in the year 1923, giving a ratio of  $1\cdot 63$  per mille, against 23,291 deaths and a death-rate of  $\cdot 51$  per mille in the preceding year. The quinquennial average was  $1\cdot 13$ .  
 Deaths and death-rate from plague (Statement XII.)

42. The highest rate of mortality ( $13\cdot 89$ ) was returned from the Azamgarh district, while Ballia and Ghazipur returned death-rates of  $8\cdot 44$  and  $6\cdot 11$  per mille, respectively. The districts of Bijnor, Naini Tal, Almora, and Garhwal were entirely free from plague, while eleven districts reported less than five deaths from this cause.  
 Plague in districts. (Statement XII.)

43. Of the towns 42 were affected, those showing the highest rates being Ghaziabad ( $34\cdot 11$ ), Mau and Mubarakpur in Azamgarh district ( $29\cdot 22$ ) and ( $25\cdot 52$ ), respectively.  
 Plague in towns. (Statement VIB.)



44. The death-rate from plague in the urban areas was 1·22 and in the rural tracts 1·66, against ·45 and ·52, respectively, in 1922.  
Urban and rural mortality from plague. (Statement VI.)

### FEVERS.

45. In 1923 the total number of deaths returned under fevers was 780,049, yielding a provincial ratio of 17·19. These figures compare favourably with those for 1922 when the number of deaths from fever and the death-rate were, respectively, 909,293 and 20·04. The average for the past five years was 36·65.  
Deaths and death-rates from fever in districts and towns. (Statements IX and VIB.)

The largest number of deaths occurred in October and the smallest in February.

According to the sub-classification, 665,319 were attributed to malaria, 14,287 to enteric fever, 5,316 to measles, 250 to relapsing fever, 86 to kala-azar, and 94,791 to other fevers. These figures are necessarily doubtful owing to the reporting of deaths being done by the ignorant village chaukidars.

The highest fever death-rate (28·50) was recorded in the district of Bulandshahr, and was followed by Hamirpur with 27·46 and Jhansi with 27·38. The lowest rates were returned from Gonda (10·34), Rae Bareilly (11·32), and Gorakhpur (11·50).

Amongst the towns, the high fever death-rates were recorded in Brindaban (39·09), Khurja (34·91), Sikandrabad (31·56), and Bulandshahr (30·04). Of the towns showing the lowest rates Naini Tal stood first with 3·49, followed by Mussoorie with 4·48, Basti with 4·92, and Mau (Azamgarh) with 5·22.

46. During the year the mortality from fever in the urban areas averaged to 16·27 and in the rural tracts to 17·26, the corresponding ratios for the preceding year being 15·68 and 20·35, respectively.  
Urban and rural mortality from fever. (Statement VI.)

47. During 1923 the recorded number of deaths from relapsing fever was 250, from enteric fever 14,287 and from kala-azar 86, as compared with 360, 19,600, and 196 in 1922. Probably relapsing fever and kala-azar are much under-reported, as there is unofficial evidence to show that these diseases are much more widespread than the statistics show. Relapsing fever was, however, certainly not present in any district in epidemic form during the year under report. As regards kala-azar there is no doubt that special research is required to establish accurately its prevalence and its geographical distribution in these provinces.  
Relapsing fever, enteric fever and kala-azar. (Statement VIa.)

48. During the year under report mild cases of influenza occurred in several districts, Cawnpore and Naini Tal having reported the largest number. The prevention of the spread of the disease was dealt with in the usual manner.  
Influenza.

### DYSENTERY AND DIARRHOEA.

49. During the year under report 5,100 deaths occurred from dysentery and 5,778 from diarrhoea, or a total of 10,878 against 10,664 in the preceding year. The death-rates for the two years were ·24 and ·23, respectively, and the mean for the last five and ten years ·35 and ·37, respectively.  
Deaths and death-rates from dysentery and diarrhoea in districts and towns. Statements X and VI B.)



The highest number of deaths was recorded in the month of September and, as usual, the lowest mortality occurred in February.

The mortality from these causes was, as usual, the highest in Garhwal where the death-rate was 3·27. Almora with a death-rate of 1·42 retained the second position which it has occupied for the last several years.

The other districts showing high mortality were Benares, Dehra Dun, and Lucknow with death-rates ·96, ·92, and ·83, respectively.

Fatehpur, Basti, Kheri, Sultanpur, and Partabgarh each showed a death-rate of ·01. Mainpuri returned the lowest number of deaths (3).

No deaths were returned from dysentery and diarrhoea by eight out of 89 towns, and in 14 the number of deaths did not exceed 10. As in the previous year, the highest mortality occurred in Hathras and the next highest in Atrauli, the death-rates being 11·38 and 8·06, respectively.

50. During 1923 the urban death-rate from these causes was 2·31 and the rural ·09 as compared with 2·02 and ·11, respectively, in 1922.

Urban and rural  
mortality from dysen-  
tery and diarrhoea.

(Statement VI.)

### RESPIRATORY DISEASES.

51. During 1923 respiratory diseases caused 26,108 deaths with a death-rate of ·57 as compared with 25,307 deaths and a death-rate of ·56 in the preceding year. The average rate for the last ten years was ·58.

Deaths and death-  
rates from respiratory  
diseases in districts  
and towns.

(Statements XI and  
VI B.)

The maximum number of deaths from these causes occurred in the month of June and the minimum, as last year, in July.

Hamirpur stood first with a death-rate of 9·63. Next came Lucknow with a death-rate of 3·64, followed by Benares with a rate of 2·30. As in last year, Kheri and Basti returned the lowest mortality, the death-rate in the former being ·01 and in the latter nil. Out of 89 towns, no deaths were reported from six, while in 14 the number of deaths did not exceed ten.

Mahoba recorded the highest mortality (17·68) during the year and was followed by Hapur with a rate of 13·49, Farrukhabad with 13·37, Kunch with 13·31, and Cawnpore with 12·73. The lowest mortality rates were recorded in Deoband (·05), Kairana (·06), and Mainpuri (·07).

In 1923 the mortality from respiratory diseases in the urban areas was 6·25 and in the rural tracts ·17. The corresponding rates for the preceding year were 6·05 and ·17, respectively.

There is no doubt that many deaths from respiratory diseases, especially pneumonia and tuberculosis, are not diagnosed, being merely returned as fever. This is evident from the large number of deaths reported from fever in months in which we know that malaria is not prevalent.

### INJURIES.

52. During 1923 injuries accounted for 21,799 deaths and suicide 1,921. Deaths caused by accidents and wounds numbered 14,154. Snakes and wild beasts were responsible for 5,510.

Deaths and death-  
rates from several  
minor causes.

(Statement VI.)

(Further details are given in Statement VI.)



## ALL OTHER CAUSES.

53. During 1923 a total of 143,945 deaths was recorded under this heading "all other causes." (Statement VI.) head as compared with 143,315 in 1922. The death-rates for the two years were 3·17 and 3·16, respectively, and the average death-rate for the last ten years 4·90.

Deaths from child-birth (Statement VIa.)

54. The mortality recorded from this cause during the year under report was 1,289 as against 1,168 in the preceding year.

55. The sub-joined table shows the ratios of deaths per cent. of the total number of deaths in the returns submitted by the medical staff and the ordinary registration agency as well as the calculated number of deaths on the data supplied by the qualified agency and the actual number of deaths reported by ordinary agency. It would appear that the death returns submitted by the unqualified agency in the case of dysentery, kala azar, and pneumonia are much below what they should be, while in the case of malaria and plague the number of deaths returned by the unqualified agency are much over-reported :—

Name of disease.	Percentage of total deaths by—		Calculated number of deaths on the data supplied by professional agency.	Actual number of deaths reported by ordinary agency.
	Verified agency.	Unverified agency.		
Cholera .. .. .	·56	·24	5,949	2,591
Small-pox .. .. .	·07	·07	700	747
Plague .. .. .	·59	7·00	6,299	74,187
Dysentery .. .. .	6·40	·48	67,887	5,100
Enteric fever .. .. .	1·09	1·35	11,548	14,237
Relapsing fever .. .. .	·03	·02	350	250
Malaria .. .. .	2·34	62·75	24,845	665,319
Kala-azar .. .. .	·13	·01	1,400	86
Pneumonia .. .. .	8·74	·48	92,733	5,088

Sections VII and VIII (omitted).

## SECTION IX.

### Civil Sanitary Works.

56. Benares, as usual, heads the list of municipalities as regards the largest number of house connections made to sewers. A few connections were made in Cawnpore, Lucknow, Allahabad, Mussoorie, and Agra. House sullage connections to surface drains in unsewered areas were made in fair numbers in Cawnpore, Allahabad, and Muttra.

**Sewer and house sullage connections.**  
**Sanitary works at Benares.**  
 57. At Benares 30·10 gallons of water were consumed daily per head of the population as against 27·8 gallons in the preceding year. The increase is due to a large number of new connections. Six hundred and fifty-five connections were made during the year, bringing the total number up to the end of the year to 11,561.

Over 93 miles of drains were flushed daily. The number of samples of water which were analysed by the Medical Officer of Health was 727—111 chemical and 616 bacteriological. The results as regards quality were satisfactory.

A sum of Rs. 9,479 was expended on various sanitary improvements, out of which Rs. 1,893 was spent on house connections to surface drains and sewers and Rs. 1,228 on the construction of pavement.

**Sanitary works at Lucknow.**  
 58. At Lucknow 12·2 gallons of water were consumed daily per head of the population during 1923 as compared with 13·4 gallons during 1922. The total number of house connections is now 5,889. Over 197 miles of drains were flushed daily during 1923. Two samples of water were analysed chemically and 147 bacteriologically; of the latter, the results of 14 from filtered water and of 15 unfiltered were unsatisfactory.

Paterson's Filtration plant was installed in November and since that time the water analytical work is being carried on in the Provincial Hygiene Institute, United Provinces, Lucknow.

A number of sanitary roads were constructed by the Improvement Trust.

**Sanitary works at Cawnpore.**  
 59. At Cawnpore the average quantity of water consumed daily per head of the population in 1923 was practically the same as in the preceding year, viz., 29·8 and 29·9 gallons, respectively. The number of house connections at the end of year was 6,810 against 6,435 in 1922. Over 117 miles of drains were flushed daily. The Chemical Examiner analysed 84 samples of water chemically and 809 bacteriologically. The results of the former were good, but in the case of latter 28 samples contained more than 100 colonies. Forty-eight samples were also tested by the Medical Officer of Health who now carries on tests in the municipal laboratory.

A good many small lanes were paved and drains constructed.

A sum of Rs. 2,41,381 was spent on various sanitary improvements during the year under report. Of this, about two lakhs was spent on the construction of sewers and over Rs. 27,000 on the improvement of grave-yards.



60. At Agra 24·7 gallons of water were consumed daily per head of the population in 1923 against 23·8 gallons in the preceding year. House connections now number 3,720, of which 398 were made during the year under report. Like last year, more than 69 miles of drains were flushed daily. Twenty-four samples were analysed chemically and 117 bacteriologically, all (except 23 taken from the Jumna) with good results.

A sum of Rs. 1,094 was spent on the paving and draining of streets, Rs. 1,332 on the repairs to old, and Rs. 697 on the construction of new, drains. The sullage farm continues to give satisfactory results. The income derived from the farm during 1923 was the same as that in the two preceding years (i.e., Rs. 9,000).

61. At Allahabad the daily consumption of water per head of the population during the year under report was 22·7 against 21·3 in the preceding year. The number of house connections rose from 4,571 in 1922 to 5,026 in 1923. The extent of drains flushed daily was 41·5 miles. The eight samples of water which were analysed chemically were declared to be potable. Six hundred and thirty-eight samples were analysed bacteriologically, out of which 87 (26 filtered and 61 unfiltered) showed above 100 colonies per c.c. All the bacteriological tests were made by the Medical Officer of Health, while the chemical analyses were carried out by Dr. A. P. Sarcar of the Muir Central College. A sum of Rs. 8,326 was spent on various sanitary improvements such as the construction of drains, incinerators, and latrines, etc.

The question of the sale of sullage to the Allahabad Agricultural Institute has been settled and an agreement entered into. The question of the abatement of nuisance caused by the overflow of surplus sullage into the river near the *sangam* is under consideration. A sum of Rs. 12,500 was allotted by Government for the diversion of emergency outlet of the Jumna sewage pumping station.

A few lengths of sanitary roads were constructed by the Improvement Trust.

62. At Mirzapur the amount of water consumed daily per head of the population in the area having a piped water-supply was 12·6 as against 13 gallons in 1922. The number of connections rose from 874 in 1922 to 1,298 in 1923. As in previous years, the length of drains flushed daily was above 9 miles.

Thirty-seven samples of water were analysed chemically and 37 bacteriologically by the Chemical Examiner to Government, United Provinces, all with good results. A sum of Rs. 19,815 was spent on the extension and repairs of water-works and Rs. 1,410 on various sanitary improvements, repairs and construction of drains, dust-bins, and latrines.

63. At Muttra 19·73 gallons of water were consumed daily per head of the population in 1923 as against 16·9 gallons in the preceding year. The increased consumption is reported to be due mainly to the continuous supply of water to Muttra city during the year. The total number of house connections at the close of the year was 855. The extent of drains flushed daily was 155,465 feet against 148,687 feet in 1922. Eight samples of



water were analysed chemically and 27 bacteriologically by the Chemical Examiner to Government. The results were on the whole satisfactory. Several cesspools, manholes, and drains were constructed. Two pail dépôts, a water-borne latrine, and an incinerator were also constructed. Two flushing tanks were made. A new pipe line was laid at Swami Ghat.

The infectious diseases hospital, for which the Board of Public Health gave the full grant, has now been completed. It is proposed to open a municipal laboratory for which apparatus worth Rs. 2,000 has been purchased.

64. At Meerut 10·8 gallons of water were consumed daily per head of the population against 11·6 gallons in the year before. **Sanitary works at Meerut.** The total number of house connections rose from 1,069 to 1,074, five new connections having been made in 1923. The length of drains flushed daily was 182,588 feet. Four hundred and eleven samples of water were analysed—10 chemically and 401 bacteriologically—all with satisfactory results.

A sum of Rs. 12,620 was spent on various sanitary improvements which included Rs. 4,568 on the filling of the Victoria Park tank and Rs. 1,917 in cleaning the Surajkund tank. A grant of Rs. 6,000 was made by the Board of Public Health for the construction of sump wells on the bank of the Abu nala.

65. At Dehra Dun the quantity of water consumed daily per head of the population was 6·1 gallons as in the previous two years. **Sanitary works at Dehra Dun.** The number of house connections (17) remains constant. The length of drains flushed daily was about 9 miles. Ten samples of water were analysed chemically, out of which one was found contaminated with organic matter. Thirty-nine samples were analysed bacteriologically and were declared potable. A sum of Rs. 5,774 was spent on various sanitary improvements including Rs. 2,380 spent on the construction of seven incinerators.

66. At Mussoorie the daily consumption of water per head of the population was 23·07 gallons against 21·9 gallons in 1922. **Sanitary works at Mussoorie.** The number of house connections is now 418. The length of drains flushed daily was over five miles. Eight samples of water were analysed chemically and the results of all except one were satisfactory. One hundred and forty-one samples were analysed bacteriologically, all (with the exception of one, the result of which was not received) with satisfactory results.

*Hydro-Electric scheme.*—Throughout the year under report the working of the electric and water-works has been satisfactory.

The Bhillaru pumping project is nearing completion. The preparation of the estimate for the storage reservoir at Bhatta is in hand.

*Sewage and drainage works—Landour sewer outfall.*—Filter beds have been installed at the end of a short extension to this outfall at a cost of Rs. 1,233. This is merely a palliative to screen out the grosser materials from the slaughter-houses connected with the sewer and has been installed to meet the complaints of Tuneta villagers who utilise the effluent for irrigation purposes.

The Happy Valley Drainage scheme is now complete, except for the installation of the pail dépôt which is in hand.



Altogether a sum of Rs. 1,31,729 was spent on various sanitary improvements. This included Rs. 52,048 on the Happy Valley Drainage scheme, Rs. 79,303 on the Bhillaru pumping scheme, and Rs. 376 on providing five incinerators at different places.

67. At Naini Tal the quantity of water consumed daily per head of the population was 7·26 gallons as compared with 9·3 gallons in the preceding year. Eleven new house connections were made during 1923, the total number of house connections up to the end of the year being 288. The length of drains flushed daily was the same as in the preceding year, viz., 6,840 feet. Four samples of water were analysed chemically. The water was declared to be "very pure but very hard." Of the 156 samples analysed bacteriologically, 33 were found unsatisfactory. A sum of Rs. 10,885 was spent on various sanitary improvements.

Sanitary works at Naini Tal.

68. The chief items of expenditure by various other municipal boards on sanitary improvements during the year were Rs. 7,360 on improvements of drains and latrines in Hardwar (Saharanpur), Rs. 9,360 on the improvement of sites in Hapur (Meerut), Rs. 18,071 on the municipal market and slaughter-houses in Shahjahanpur, Rs. 13,683 and Rs. 12,592 on sinking of tube wells in Farrukhabad and Moradabad, respectively, Rs. 3,564 on construction of beef shops in Kunch (Jalaun) and Rs. 2,367 for preparing the drainage scheme in Balrampur (Gonda).

Chief items of expenditure in other towns.

69. From the reports received in this office it was noticed that during 1922-23 out of the various municipal boards having water-works only two (Benares and Allahabad) had samples analysed according to the standard prescribed by Government. The Board of Public Health have reported the matter to Government, and it is hoped that Government will direct the municipal boards concerned to have samples of water analysed according to the standard fixed.

Municipal water-supplies.

70. The statement showing the death-rates of the localities where a drainage system or water-supply has been introduced forms Appendix A of this report.

Death-rates of the localities where a drainage system or water-supply has been introduced.



## SECTION X.

**Personal proceedings, public health services, and general remarks.****A.—PERSONAL PROCEEDINGS.**

71. The charge of the office of Director of Public Health, United Provinces, as well as that of Medical Officer, Government Bovine Lymph Dépôt, Patwa Dangar, was held by me throughout the year.

During the year, I inspected sanitation or vaccination in the districts of Meerut, Sitapur, Aligarh, Bareilly, Fyzabad, Gorakhpur, Unao, Agra, Cawnpore, Muttra, Shahjahanpur, Bara Banki, Basti, Lucknow, Rae Bareilly, Allahabad, Fatehpur, Mainpuri, Etah, Farrukhabad, and Naini Tal.

Candidates for the apprentice sanitary inspector's classes were, as usual, inspected at the divisional headquarters during the monsoon tour and matters of public health interest were enquired into in those centres.

The Government Bovine Lymph Dépôt, Patwa Dangar, was inspected more than once in connection with matters of administration.

Pilibhit and Banbassa were visited in connection with anti-malarial works and Basti, Gorakhpur, Deoria, and Barhalganj to enquire into the work carried out under the District Health Scheme.

Various meetings of the Board of Public Health, the State Board of Medical Examinations, the Medical Council, and the Faculties of Science and Medicine, Lucknow University, were attended. I also attended meetings of the Anti-tuberculosis League and the Building Board and gave evidence before the Economy Committee and the Royal Commission. The examinations of the D. P. H., L. P. H. and Sanitary Inspectors' classes were conducted as usual.

**B.—ASSISTANT DIRECTORS OF PUBLIC HEALTH OF RANGES.**

72. Major W. A. Mearns, I.M.S., held charge of the 1st Range from the 1st January to 25th November, 1923. On the 26th November he was transferred to the 2nd Range and placed in collateral charge of the 1st Range, which he held until the close of the year.

Major T. D. Murison, I.M.S., remained in charge of the 2nd Range from the 1st January to the 25th November, 1923, when he proceeded to Assam to take up the appointment of Director of Public Health.

Drs. A. Sousa and K. P. Mathur were in charge of the 3rd and 4th Ranges, respectively, throughout the year under report.

Major Mearns inspected sanitation or vaccination in thirty-six municipalities, in the Mawana, Pilkhua, Marehra, Shikohabad, Mainpuri civil station and Kosi notified areas and Garhmuktesar town area, as well as in the districts of Lucknow, Unao, Sitapur, Kheri, Bara Banki, Fyzabad, and Sultanpur, and the Najibabad Salvation Army Settlement.

He also supervised the sanitary arrangements of the Nauchandi (Meerut), Dikhauti (Hardwar), Shahkumber Devi (Saharanpur), Garhmuktesar (Meerut district), and Tigri (Moradabad district) fairs.

He investigated outbreaks of plague in Ghaziabad and the adjoining villages advising the local authorities on the measures to be taken to stamp out the disease and pushing on vigorously plague preventive measures in



those areas. Bulandshahr, Khurja, and Sikandrabad were also visited in connection with the plague epidemic.

In September he was on cholera duty in Hathras, Aligarh, Firozabad, and Kaimganj and inspected several travelling dispensaries.

He conducted the L. P. H. examination at the King George's Medical College and inspected the Maclaren Leper Asylum, Dehra Dun, with a view to its expansion.

Major Mearn's work in connection with the plague outbreak in Ghaziabad and the surrounding villages and in connection with the cholera outbreaks in Hathras, Aligarh and Firozabad deserves special commendation.

Major Murison inspected sanitation or vaccination in eleven municipalities, in the Haldwani and Bhim Tal notified areas, as well as in the districts of Lucknow, Bara Banki, Unao, Rae Bareli, Partabgarh, Gonda, and Fyzabad. He supervised the sanitary arrangements of the Ram Naumi and Sawan Jhula fairs in Ajudhia. He visited Rae Bareli in connection with the reduction of the posts of assistant superintendent of vaccination and vaccinators and Sultanpur, Gonda, and Balrampur in connection with cholera outbreaks. He also visited Fyzabad and Sitapur in connection with plague.

Dr. Sousa inspected the sanitation of the Kalpi, Jhansi, Lalitpur, Kanauj, and Farrukhabad municipalities and Kaimganj notified area and Chirgaon, Moth, Shamshabad, and Tirwa town areas and vaccination work in the municipality of Allahabad as well as in the Allahabad and Banda districts. He visited Kanauj to report on a site for a flour mill.

He attended two meetings on the courses and studies of the D. P. H. class. He visited Etawah twice—once to investigate into an epidemic reported by the District Magistrate and again to make enquiries into the work of the Medical Officer of Health and the Sanitary Inspector there about whom complaints were received by me. He went to Banda to discuss with the district authorities the arrangements against the spread of plague which was present in the municipality in epidemic form. He was in charge of the sanitary and medical arrangements of the Magh Mela, 1923. He attended a meeting of the Oudh and Rohilkhand Railway, as well as of the Joint Magh Mela Committee in connection with the sanitary arrangements of the Adh-Kumbh fair, 1924. November and December were taken up in making sanitary arrangements for the Adh-Kumbh fair and looking after the sanitation of Arail, Jhusi, and the Mela area. Magic lantern demonstrations on the common infectious diseases were also given at the Y. M. C. A., Allahabad.

Dr. Mathur inspected the vaccination work in the Mirzapur, Benares, Ghazipur, Gorakhpur, Basti, Ballia and Jaunpur districts, the Chunar settlement notified area and the Benares, Ghazipur, Gorakhpur, Ballia, and Mirzapur municipalities. He inspected the sanitation of Phulpur and Muhammadabad (Azamgarh district), Baragaon, Sahatwar, Bansdih and Basantpur (Ballia district), Zamania and Saidpur (Ghazipur district), Mariahu (Jaunpur district), Chunar, Ahraura and Chunar settlement (Mirzapur district) Basti and Gorakhpur, Padrauna, (Gorakhpur district) as well as of the Government High School, Mirzapur, and the hostel attached thereto.



He discussed with the local authorities and supervised the plague preventive measures in the districts of Benares, Jaunpur, Azamgarh, Basti, Gorakhpur, and Ghazipur. He investigated the working of the district health scheme in Basti and discussed with the district board the question of making it permanent. He also discussed the question of the employment of district health staff with the local authorities at Ballia, Ghazipur, and Jaunpur and attended the meetings of the district boards of Basti and Gorakhpur in which the question of the permanency of the district health scheme was considered. The districts of Ghazipur, Ballia, and Benares were visited in connection with outbreaks of cholera.

He also inspected many travelling dispensaries in his range and supervised the sanitary arrangements of the Dadri fair at Ballia.

### C.—PUBLIC HEALTH SERVICES.

73. The D. P. H., L. P. H. and Sanitary Inspectors' classes were conducted, as they were last year in the Pathological block of the King George's Medical College, by Rai Bahadur Dr. D. D. Pandya, Assistant Director of Public Health (Provincial Hygiene Institute) and Dr. J. T. Cornelius, his assistant. Great inconvenience was experienced owing to the insufficiency of the existing accommodation.

*D. P. H.*—One student, who was admitted to the class during 1922, came out successful in Part I of the examination held in May, 1923, and is undergoing training in Part II. No candidates sought admission this year to part I of the D. P. H. course owing to the uncertainty of the prospect of employment.

There are many graduates of Lucknow University who are ready and willing to take up a Public Health career provided that there is any reasonable hope of employment. They can hardly be blamed for not undergoing a Public Health training which extends over 18 months and is also expensive, if their prospects of employment are exceedingly doubtful.

*L. P. H.*—Out of the seven students admitted to the class in July, 1922, one dropped out in September and six appeared for the examination in April, 1923. Five students passed in Part I and four in Parts I and II.

The supplementary examination was held in October, 1923, and out of the two candidates one who appeared in Part I was successful but both failed in Part II.

The present L. P. H. class was started in July, 1923. Eight students were admitted to it but two dropped out. The remaining are under training.

A large number of candidates are waiting for admission to this class but owing to the paucity of accommodation only eight can with difficulty be trained at a time. The popularity of this class is due to the fact that all approved licentiates are certain of immediate employment in the travelling dispensaries with a prospect of promotion to Assistant Medical Officers of Health in districts and Medical Officers of Health of third class towns.

*Sanitary Inspectors' classes.*—These classes commenced in October, 1922, and the course was finished in February, 1923. Out of the 21



students who were admitted to the Apprentice Sanitary Inspectors' examination, 13 passed. Two failed candidates of the previous year were also admitted to this examination but only one was successful.

Of the 16 candidates who appeared at the Sanitary Inspectors' examination, 14 passed.

Both the present Sanitary Inspectors' and Apprentice Sanitary Inspectors' classes were started on the 1st October, 1923, with 23 and 36 students, respectively.

*Examination of Chief Sanitary Inspectors.*—Five candidates were examined in March, 1923, of which three were successful.

*Examination of Medical Officers of Health in Provincial Municipal Law.*—Three Medical Officers of Health were examined in January, 1923, in provincial municipal law affecting sanitation and all of them were successful.

*M.B., B.S., Class.*—The courses in Hygiene and Vaccination for the undergraduates, which commenced in August, 1922, were finished in March, 1923. Of the 28 candidates who appeared for the final M.B., B.S., (Group A) in State Medicine 23 were successful.

The five unsuccessful candidates who appeared at the supplementary examination held in October, 1923, all passed.

The present class started in August, 1923, and the course still continues.

A course on the theory and practice of vaccination was given at one of the municipal vaccination centres in Lucknow.

*Post-graduate course to the members of the United Provinces Provincial Medical Service in State Medicine.*—The dates of the commencement of this course have been changed from October to January and special lectures have been substituted in place of the curriculum previously in force.

*Investigative work.*—For lack of laboratory facilities no investigation of a specialized kind was undertaken during the year 1923. However, some work of a very interesting nature was carried out in the laboratories.

1. Bacteriological tests of the newly installed Paterson Filters of the Lucknow municipality were carried out over a period of three months with the result that the efficiency of the newly installed plant was determined to be satisfactory.

2. *Bacteriological examination of air.*—Samples from different parts of Lucknow were taken to determine the relative purity of the air in different parts of the city and to ascertain the bacteriological quality of the air. This investigation is not complete as yet.

3. (a) Water samples sent to the laboratory for advice regarding their potability were chemically analysed and reported on.

(b) Samples of sugar factory effluents were examined to determine the lowest amount of clarifying agents to be added to cause the precipitation of organic substances present in them, as a preliminary step to prevent fermentation and the nuisance arising therefrom.

(c) *Miscellaneous.*—Analytical and bacteriological work in connection with the examination of samples of aluminoferric, ghee, sweets, urine,



disinfectants (Germole and Izal) and rat fleas for determining plague infection in them, were also carried out.

In addition, a Hygienic Household filter sent to the laboratory by Messrs. Hygienic Household Filter Company of Calcutta for opinion was tested and found unsatisfactory.

Rai Bahadur Dr. D. D. Pandya was placed in charge of the medical and sanitary relief work in connection with the floods in Lucknow from the third week of September to the third week of October, during which period he was also in supervising charge of the public health of the city. The sanitary arrangements made were satisfactory, there being a total absence of the occurrence of any epidemic disease among the refugees or the inhabitants of the city.

The need for the construction of a properly equipped Provincial Hygiene Institute is absolutely imperative in order that those desirous of taking up prevention of disease and public health as a career may receive a training up to the standard required in other civilized countries and thus do away with the necessity of students undergoing great expense in proceeding to Europe and America for such training. The project has been accepted by Government and the Council and is on the approved list of buildings, but owing to lack of funds it has now twice been shelved. It is to be hoped that Government will find funds for this most important and necessary educational work in the next budget.

74. Major J. A. S. Phillips, I.M.S., Assistant Director of Public Health (Malariology), assisted by his staff carried out the Malaria Branch. work of the Malaria branch during the year under report.

The year 1923 was a busy one for the Malaria branch for in addition to the important work that is being done annually at Banbassa, the head-works of the Sarda canal, and at other centres in the canal area, several towns, villages, and districts were visited and reported on.

The health of the labourers employed at Banbassa and elsewhere in the canal area, as far as malarial fever was concerned, was on the whole good and distinctly better than it was last year. This improved state of health was wholly due to the activities of this branch.

A series of blood slides taken from cases reported to be suffering from severe malaria at Duni (IV division of the Sarda canal) were found to contain the spirilla of relapsing fever, and by adopting the prompt and energetic measures, which this finding necessitated, what might have developed into a serious epidemic of relapsing fever, was averted.

A large number of mosquitoes were brought to the laboratory for identification and the usual breeding out experiments of larvæ were carried out. Assistance was also rendered to the various canal hospitals by the bacteriological examination of material other than blood films.

In February, 1923, some preliminary investigations were carried out in the Tarai and Bhabar estates at the request of the Superintendent. Seventeen villages were visited and a total of 616 children were examined for enlarged spleens; of this number 360 or 58 per cent. of them were found to have enlarged spleens. This figure, although high, compares favourably with what was found to be the case amongst the children in the Gadarpur tahsil of the Tarai.

In December, 1923, investigations were carried out in this tahsil and the result, as expected, was bad. Here, there is a tract of land with a spring



water level that is nowhere much below 5 feet from the surface and which receives more water from irrigation canals than is necessary. The population is sparse and the people, who are constantly suffering from malaria, are quite unfitted for any labour. The canal *guls* are neglected and the surrounding country is flooded from breaks in these *guls* in consequence. These conditions are eminently suitable for malaria.

Nine hundred and thirty-three children were examined and 821 or 88 per cent. of them had enlarged spleens. In many villages the percentage was 100.

The towns of Lucknow, Nagina, Meerut, Saharanpur, and Kosi, where various anti-malarial measures had been carried out in the past, were visited with a view to determining the effect of these measures on the incidence of malaria. Complete reports on these towns have already been submitted. In these reports details are given of the anti-malarial works carried out which have resulted in all these towns in a greatly improved state of health as far as malarial fever is concerned. In Saharanpur the reduction in endemic malaria was from nearly 80 per cent. to 7 per cent.

The important railway town of Lhaksar was again visited and a further report with recommendations was submitted.

A complete survey of the town of Pilibhit was also carried out.

A complete report of the malarial survey of the town of Bareilly, which was carried out in the autumn of 1922, was prepared and submitted.

The branch returned to Banbassa on the 9th of October, 1923, in order to carry out active anti-malarial operations so as to render the place as healthy as possible before the advent of the large gangs of labour. Owing to the late monsoon and very heavy rain late in September and early in October conditions were bad when anti-malarial measures were begun. High grass and jungle prevailed everywhere more especially in the various *nala* beds. The high grass and the swampy *nalas* which had been breeding mosquitoes were soon cut and cleared and the results were satisfactory, the mosquito population dropping rapidly after the first ten days. During the working season, vigorous quinine prophylaxis under personal supervision was carried out with the result that there was practically no malarial fever at Banbassa during the month of October. This was continued throughout November until the 10th of December, 1923.

As stated elsewhere, the most important work undertaken by the department was at Banbassa. The working season has been extended by at least two months every year and it seems quite probable that in future work will be in full swing by the 1st of November instead of 15th November.

Proposals to extend anti-malarial operations in the United Provinces and to train all medical officers of health in anti-malarial work are under the consideration of Government.

#### *Sale and distribution of quinine. —*

During the year under report quinine worth Rs. 7,784 was sold by post offices, vaccinators, landlords, and court of wards against Rs. 14,293 worth sold in the preceding year. No quinine was sold by school masters, patwaris, tahvildars, and stamp vendors in 1923. Post offices sold quinine worth Rs. 6,414 and court of wards worth Rs. 1,220.

The Aligarh jail issued 225 lbs. of quinine for the use of travelling dispensaries, 153 lbs. for free distribution in districts, 3 lbs. for school



quininization in Saharanpur and Ghazipur, and 2 lbs. for prophylactic issue to the jails,

In addition the Police and Jail departments distributed a few lbs. for prophylactic purposes.

75. The printing of a separate plague report having been discontinued, the incorporation of the same in the Annual Sanitary  
**Plague branch.** report was sanctioned by Government in G. O. no. 161/XVI—35, dated the 15th May, 1923, so that the observations made in this para. relate to a period of 18 months, viz., 1st July, 1922 to 31st December, 1923. In future an account of plague will be given for the calendar instead of the epidemic year.

There were 81,094 deaths from plague during the 18 months under report, out of which 80,817 occurred in the British districts and 277 in the Benares State. No deaths were reported from the Rampur and Tehri States.

It will be observed from the following table that after four years of mild plague, the death roll has rapidly increased to four times the amount recorded during the previous epidemic year :—

Year.	Number of plague deaths.					
1903-04 .. .. .	..	..	..	..	..	139,524
1904-05 .. .. .	..	..	..	..	..	434,217
1905-06 .. .. .	..	..	..	..	..	60,767
1906-07 .. .. .	..	..	..	..	..	341,725
1907-08 .. .. .	..	..	..	..	..	26,646
1908-09 .. .. .	..	..	..	..	..	14,252
1909-10 .. .. .	..	..	..	..	..	166,360
1910-11 .. .. .	..	..	..	..	..	344,776
1911-12 .. .. .	..	..	..	..	..	120,271
1912-13 .. .. .	..	..	..	..	..	93,628
1913-14 .. .. .	..	..	..	..	..	116,561
1914-15 .. .. .	..	..	..	..	..	58,329
1915-16 .. .. .	..	..	..	..	..	45,528
1916-17 .. .. .	..	..	..	..	..	105,080
1917-18 .. .. .	..	..	..	..	..	206,190
1918-19 .. .. .	..	..	..	..	..	17,633
1919-20 .. .. .	..	..	..	..	..	24,002
1920-21 .. .. .	..	..	..	..	..	25,901
1921-22 .. .. .	..	..	..	..	..	18,268
1922-23 .. .. .	..	..	..	..	..	76,607

The mortality rose slowly between July and November, 1922, when there was a sharp rise from 1,120 deaths in November to 4,990 deaths in December, 1922. It went on increasing rapidly till the maximum (26,249) deaths was reached in March, 1923.

A decline then commenced, only 359 deaths having been recorded in June, 1923.

Azamgarh was the worst affected district in the Province with 23,259 deaths during the period under report; Basti reported 10,292 deaths followed by Gorakhpur with 10,065. Then came Ballia with 7,596; Ghazipur with 5,460, Fyzabad with 4,391, Cawnpore with 3,354. Meerut with 3,041, and Benares with 2,197 deaths.

Two graphical charts—one showing the course of the disease in its seasonal variation from July, 1903, to June, 1923, and the other showing the course during the calendar year ending 31st December, 1923—are attached at the end of the letter press.

*Inoculations.*—The total number of inoculations performed during the period under report was 62,615, out of which 30,716 were performed



by travelling dispensaries, 6,095 by special health officers, and 25,804 by different agencies.

The attitude of the people towards inoculation was on the whole satisfactory. They realized the value of inoculation as a preventive measure, but did not volunteer until the disease was actually raging in their villages. A statement showing the protective effects of anti-plague inoculation is attached to this report as appendix D.

*Evacuation.*—This continued to be a popular anti-plague measure and the people in most districts resorted to it, without any persuasion, on the appearance of the disease in their villages.

The allotment made to commissioners of divisions and the district magistrates to assist people in evacuating their houses was, on account of financial stringency, discontinued from 1st April, 1922, but owing to pressing demands Rs. 8,002 were placed at the disposal of the district magistrates and the chairmen of district and municipal boards from my cholera grant to enable them to carry on this useful anti-plague measure.

*Travelling dispensaries.*—The provincial travelling dispensaries were reduced from 63 to 36 from 1st April, 1923, and the district board ones from 49 to 6 from 31st December, 1923. It is a matter for great regret that the majority of the district boards have abolished their travelling dispensaries, which have proved their usefulness in many outbreaks of epidemic disease and it is hoped that the experience of one year without them will induce them to reconstitute them next year.

In the meantime they are being kept at district headquarters ready for use in emergencies and eight of these have been temporarily mobilised for plague and cholera duty.

The total number of travelling dispensaries working at present is 45, out of which 36 are Public Health travelling dispensaries, six District Board, one Forest attached to the North Kheri division, one Isanagar Court of Wards, Kheri, and one Sahaspur Belari estate. The last three dispensaries are entirely maintained by the Forest department and the estates concerned.

The six district boards, namely, Almora, Bulandshahr, Kheri, Gonda, Bahraich, and Gorakhpur, which have resolved to maintain their travelling dispensaries continue to pay the usual contribution of Rs. 1,000 per travelling dispensary, the rest of the cost being borne by Government.

Out of the 36 Public Health travelling dispensaries 30 are employed on general duty and six on Sarda canal.

The total number of patients treated by these dispensaries during the period under report was 1,411,775 and the number of operations performed were 23,309 including 700 major operations.

*Educational work.*—Propaganda work and magic lantern demonstrations on public health subjects were given on a large scale in big cities and fairs and a large amount of literature was distributed by travelling dispensaries in towns and villages.

*Recognition of special services with regard to plague.*—Four sanads and five parwanas were awarded for assistance in plague measures during the year 1921-22.



The following gentlemen have been recommended for mention in the Annual Report for giving conspicuous help in dealing with plague epidemic :—

1. Pandit Har Charan Dube, zamindar, Hati-ka-purwa, Police station Wazirganj, tahsil Tarabganj (district Gonda).

2. Mahant Basdeo Dass, Srinagar, police station Srinagar, (district Gonda).

As a measure of economy the post of the sub-assistant surgeon in charge of the Central Plague Godown was abolished from 1st April, 1923, and a storekeeper of the compounder grade employed in his place.

To effect a further economy the following staff has also been reduced from 1st April, 1923 :—

One clerk,

One compounder,

One godown coolie, and

One office peon.

Besides the medical officers in charge of travelling dispensaries four special health officers worked in the districts of Ghazipur, Ballia, Jaunpur, and Gonda.

In order to render the Public Health travelling dispensaries more useful, highly organized and efficient for public health work, Government sanctioned in G. O. no. 1828/XVI—34, dated the 16th May, 1923, the appointment of medical officers with the L. P. H. qualifications to the charge of these units and consequently the services of four provincial subordinate medical service officers with the requisite qualifications were entertained. Others will be employed as each batch passes the necessary examination.

76. During 1923, propaganda work was carried on on a larger scale and demonstrations and lectures were given in nearly every district and town.

Provincial Hygiene  
Publicity Bureau.

The scheme has attracted wide notice all over India with the result that organizations for hygiene publicity in other provinces are following our lead.

The Indian Red Cross Society has been highly complimentary towards our methods and our publications, so much so that they have, with our permission, adopted nearly all our publications and have prepared large quantities for distribution all over India.

Dr. Khalil-ul-Rahman, M.B., B.S., D.P.H., the Assistant Hygiene Publicity Officer, is in immediate sub-charge of this branch and he organizes popular lectures and magic lantern demonstrations. All the Public Health travelling dispensaries carried on propaganda work and were provided with the literature and complete magic lantern equipment, etc.

Public Health travelling dispensary no. 1 was specially placed at the disposal of the Assistant Hygiene Publicity Officer to cope with the increasing demand for lectures.

In addition to the Government grant of Rs. 5,200 a sum of Rs. 6,100 was realized from district and municipal boards and the United Provinces Branch of the Indian Red Cross Society made a recurring grant of Rs. 12,000.



Baby shows, which are being held all over the province, were provided with illustrated posters, booklets, stories, magic lanterns, and lecturers and a good many of them were supplied with models. The assistance given by the bureau had a great deal to do with the general success of these shows.

Nearly all the important fairs and exhibitions had the benefit of the propaganda work of the bureau.

With the help of the Red Cross grant, the bureau was able to revise and add to the subjects of Child Welfare and Consumption and to take up Leprosy as a new subject. A very useful book with illustrations on child welfare was issued and hundreds of copies have been sold and distributed.

77. The District Health scheme which was experimentally introduced in the districts of Gorakhpur and Basti in 1922 was extended to the Azamgarh district in 1923.

District Health  
scheme.

All the town areas and villages under the Village Sanitation Act and a number of other villages were inspected by the Health staff. The sanitary defects found in the villages were in many cases removed by the inhabitants themselves. Verbal instructions on personal hygiene and various infectious diseases were given in many villages. Hygiene propaganda work was carried on by (a) magic lantern demonstrations, (b) lectures in the Aman Sabhas, etc., (c) publication of articles in the local papers, (d) lectures to teachers and schools during school inspections, and (e) distribution of pamphlets and booklets. The training and middle schools were supplied with illustrated booklets issued by the Provincial Hygiene Publicity Bureau.

In the district of Basti the villages which were noted last year to be centres of plague infection and where plague was endemic were closely supervised by the Health staff and every effort was made to improve their sanitary condition. The result was that none of these were infected with plague during the year under report.

The staff have made themselves popular and the service is being recognized by the public at large as being not only beneficial but also necessary. The efficiency of vaccination has been increased in the districts under the scheme and outbreaks of epidemic were stamped out promptly. The travelling dispensaries in these districts, on account of close supervision by the district health staff have done good work and are much more efficient than those in other districts which are only inspected at long intervals.

The District Medical Officers of Health of these districts have submitted lengthy and detailed reports of their work since their appointment, and from a careful perusal of these reports, it appears that much amelioration in the existing conditions has resulted, the total death-rates have been largely reduced, as has also the infantile mortality, the malaria death-rate and especially the cholera death-rate. In all these districts the number of inoculations against plague have been doubled or trebled, the numbers of inspections of vaccination have been largely increased and the numbers of inspections of vital statistics are also far more than in previous years.



Owing to financial stringency, the extension of the scheme to other districts has been retarded but it is hoped that it will be possible to extend the scheme to more districts in the near future.

I consider that the success of the scheme is due to the fact that the public health personnel appointed are qualified officers who have taken up public health as a career and who therefore are personally interested in the results obtained from their work. In the past, temporary assistant surgeons and sub-assistant surgeons who were employed on anti-epidemic duty had little interest in their work owing to the absence of any prospects as the result thereof and whose chief ambition was to get an appointment in the medical department, such as the charge of a dispensary. It is therefore to be hoped that there will be no reversion to the system which loaded the civil surgeon with a large amount of work which he had neither the time nor as a rule the training to carry out, but that each district in time will be provided with a qualified and energetic staff of public health officers whose prospects depend entirely on their own efforts in proving their value to the community.

The local authorities are favourably impressed with the results of the scheme and highly appreciate the work of the staff. The Board of Public Health recommends its extension to other districts as funds permit.

Proposals have been submitted to Government with a view to placing the service of district medical officers of health on a proper footing which will give them security of tenure and the prospect of a useful career in the public health service and I trust that these proposals will be favourably considered by Government and brought into force at an early date.

78. In resolution no. 1294/XI—800-D., dated the 23rd July, 1921, Government sanctioned the classification of municipalities as regards the appointment of medical officers of health, which was as follows :—

*First class*—Seven, viz., Allahabad, Benares, Cawnpore, Lucknow, Agra, Naini Tal, and Mussoorie.

*Second class*—Fourteen, viz., Dehra, Saharanpur, Meerut, Hardwar Union, Bareilly, Koil (Aligarh), Muttra, Moradabad, Shahjahanpur, Jhansi, Mirzapur, Gorakhpur, Fyzabad, and Farrukhabad-cum-Fatehgarh.

*Third class*—Nine, viz., Budaun, Chandausi, Etawah, Hathras, Jaunpur, Pilibhit, Sitapur-cum-Khairabad, Hapur, and Bahraich.

As many as ten municipal boards, viz., Moradabad, Jhansi, Mirzapur, Gorakhpur, Chandausi, Jaunpur, Pilibhit, Sitapur, Hapur, and Bahraich have not yet appointed medical officers of health on the general ground of paucity of funds. It is hoped that they will take up the matter in earnest in the near future and see their way to comply with the wishes of Government as soon as possible. It is essential to the welfare of the whole community that towns as large as these should have properly organized health service. In other civilized countries local bodies of this size and even of much smaller size are bound by law to employ medical officers of health and sanitary inspectors in adequate numbers and I think it will be generally admitted that the time has come for the United Provinces to fall into line with other countries in this respect.



The position of the Medical Officers of Health, although the service is provincial, is at present unsatisfactory. Their posts are neither pensionable nor are they admitted to the benefits of the municipal provident funds. There is little security of tenure and the future career of a medical officer of Health is often hanging in the balance, as in many cases he has to depend to a great extent on the good-will of the members of his board. Much discontent, therefore, prevails among the members of the service. I strongly urge that an early opportunity be taken to consider the proposals submitted by me sometime ago to ameliorate their conditions of service and give them reasonable security of tenure. These proposals, if given effect to, would, I am sure, result in greater efficiency.

79. The office of the Public Analyst to Government, United Provinces, was held by Mr. P. S. MacMahon, M.Sc., from 1st January to 27th April, 1923. During his absence on five months' leave in continuation of the University vacation, his assistant, Mr. Niranjana Vede Joshi, B.Sc., acted as Public Analyst from the 28th April, 1923 to 31st May, 1923, in addition to his own duties and Dr. Biraj Mohan Gupta, M.Sc., etc., from the 1st June, 1923 to the end of the year.

During the year under report the provisions of the Prevention of Adulteration Act were extended to the municipalities of Pilibhit and Brindaban in respect of ghee, milk, and butter and ghee, milk, edible oils and flours, respectively. Four hundred and twelve samples were received by the Public Analyst during 1923, against 335 in the preceding year—186 of ghee, 140 of milk, 34 of flours, 32 of edible oils, 4 of butter and 16 miscellaneous (sweets, cream, and "vegetable ghee", etc.). Of these, 24 samples (17 of milk, 5 of ghee and 1 each of oil and flour) could not be analysed as they were received in a damaged condition. Of the remaining 388 samples, 76 of milk, 32 of ghee, 5 of flour, 1 of butter and 8 miscellaneous were certified as adulterated, five samples suspicious and the remaining as genuine. One hundred and thirty-one persons were prosecuted under the Act, of whom 104 were fined and 2 acquitted. The cases of 5 were withdrawn and 20 are pending. The total amount of fines realized was Rs. 2,779 against Rs. 911 realized in 1922. No samples were received from the municipalities of Firozabad, Muzaffarnagar, Pilibhit and Brindaban. In Firozabad Pilibhit no article is reported to be suspected of being adulterated. In Muzaffarnagar the civil surgeon was authorised to collect the samples so long as he was a member of the municipal board. As he is no longer a member of the board, no samples could be sent. In Brindaban the Act was introduced only in December, 1923.

The total number of samples (412) mentioned above includes 12 samples received from other sources. Rs. 180 was deposited into Government treasuries by the chairman, municipal board, Baraut, and the medical officer of health, Hathras, as fees for their analyses. All the 12 samples were certified as adulterated. No legal proceedings were instituted as the Act was not in force in those places.

80. Dr. S. H. Commissariat, Organising Secretary of the United Provinces Branch of the All-India Lady Chelmsford League for Maternity and Child Welfare, has kindly furnished a copy of her report in connection with the maternity and child welfare work done in these provinces under



the general supervision of the Inspector-General of Civil Hospitals, United Provinces, during 1923, from which an abstract is appended :—

The United Provinces Branch of the All-India Lady Chelmsford League for Maternity and Child Welfare work was inaugurated by His Excellency Sir Harcourt Butler, K.C.S.I., C.I.E., the then Governor of these Provinces in December, 1922. Since then two meetings of the Organizing Committee under the presidency of His Excellency the Governor were held in the months of June and September, 1923. Two sub-committee meetings have also been held for special purposes.

At Allahabad a scheme of maternity and child welfare work was launched under the auspices of the League, in July, 1923. Midwives have been appointed in different localities to visit the homes of expectant mothers and to attend to confinement cases, their other duties being to explain to the public in general the measures to be adopted in order to combat the high infantile mortality. To supervise the work of these midwives, two sub-assistant surgeons have been employed.

Improvement of indigenous *dais* is also carried on under the charge of two resident midwives and the Health Visitor for these provinces, whose headquarters are at Allahabad.

There is also a maternity and child welfare centre at Pilibhit and a resident midwife is working there under the municipality. The total number of visits made by the midwife during 1923 was 276. The midwife is becoming popular but the intense conservatism and general apathy of the people sometimes acts as an obstacle in the way of any rapid progress.

A midwife is entertained by the district and municipal boards at Muzaffarnagar to attend cases.

At Bareilly Mrs. Stubb's maternity and Child Welfare Society, which has been affiliated to the United Provinces Branch of the All-India League put in very good work. Six hundred and forty delivery cases were attended by the staff employed there while the out-door attendance at the centre was 239 during the year. Of the cases attended 118 infants and nine mothers died.

At Muttra Miss Ramsden of the Mission Church is working at a dispensary in the heart of the city for maternity and child welfare. She gives lectures to female patients on the subject.

At Bahraich a midwife has been appointed to attend normal labour cases free of charge.

In addition there are centres for improvement of indigenous *dais* at Lucknow, Agra, Allahabad, Meerut, and Gonda. The Agra centre has recently been closed as the municipal board have started a Baby Clinic at their own expense.

At each centre a resident midwife is working in connection with this scheme and the expenses of Rs. 4,131 during the year were met out of the grant of Rs. 10,000 received from the Local Government by the Dufferin Fund. This scheme is carried on under the auspices of the Victoria Memorial Scholarship Fund but since January, 1924, the management and control of this scheme with the savings for the year 1923 have been taken up by the United Provinces Branch of the League.

Two more centres, at Bareilly and Bahraich, are going to be opened shortly and it is hoped many more will be opened in 1924.



At the instance of Her Excellency the Countess of Reading, it was proposed and approved by the United Provinces Branch of the League that a National Baby Week should be organised in all the districts of these provinces in order to rouse public interest in the problem of maternity and child welfare. Accordingly circulars were issued by the Local Government to commissioners of divisions and district magistrates to observe the third week of January as the National Baby week. As the third week of January did not suit some centres they were permitted to observe the week at their own convenience.

In addition, the scheme for the training of midwives introduced at Gorakhpur, Fyzabad, Meerut, Aligarh, Moradabad, Allahabad, Bareilly, Benares, Cawnpore, and Agra, the last only this year, is making steady progress.

The expenses in this connection were met by the Provincial Committee of the Dufferin Fund out of the grant of Rs. 6,000 received from the Local Government for this purposes.

Six midwives have been sanctioned for training at the Dufferin Hospitals at Allahabad, Benares, and Lucknow, four at Cawnpore and two at each of the remaining places. Four have been sanctioned for training at the Women's Medical School and Hospital at Agra.

Thus in all 36 probationer midwives have been under training, out of which, six were discharged or left being unsuitable, 14 passed out (nine in the State Board Examination and five in the modified examination.) The remaining 16 are under training.

In all Rs. 3,427 were advanced to the centres.

The actual expenditure amounted to Rs. 3,644, the extra amount being met from the advance held by them from the last year.

The midwives under training are also visited by the Superintendent of Medical Aid to Women when she visits the hospitals.

With the approval of the Local Government, the above scheme has also been taken up with the savings of this year by the United Provinces Branch of the League with effect from 1st January, 1924.

At Pilibhit the indigenous *dais* are trained at the expense of the local funds in the X-Ray Institute of the male hospital by the municipal midwife employed there.

At Sitapur, *dais* are trained by the municipal midwives in the city and at Khairabad, and 131 and 151 cases were attended, respectively.

At Shahjahanpur indigenous *dais* are trained by the sub-assistant surgeon in charge of the Dufferin Hospital. Twenty-three *dais* were thus admitted for training out of which 19 passed and four are still under training.

The Medical Officer of Health, Lucknow, reports that five midwives were employed by the municipal board, Lucknow, during the year under report. Their activities were extended to two other wards during the year. There are also two health visitors who supervise the work of these midwives. The number of labour cases conducted by the health visitors and midwives was 370 and that of expectant mothers seen 453.



## D.—GENERAL REMARKS.

81. A *résumé* of the Public Health activities shown by the municipal boards in the province during the year under report is given in section IX and appendix B of this report as well as in the report of the Superintending Engineer, Public Health department, which is annexed.

**Sanitary progress.**

82. Eight meetings were held by the Board of Public Health during the year 1923 and the report of their proceedings is annexed to this report as appendix B.

**Board of Public Health.**

Grants sanctioned by the board during the year under report aggregated Rs. 6,87,035. Out of this, Rs. 45,000 was allotted for petty sanitary works in notified and town areas, Rs. 31,603 for sanitary improvements through village panchayats and Rs. 20,397 for rural sanitation. Of the schemes considered by the board during the year, projects for various works, the cost of which amounted to Rs. 38,49,010 were administratively approved.

83. Out of Rs. 23,397, sanctioned by the Board of Public Health for rural sanitation during the year under report, Rs. 7,700 was given to District Board, Saharanpur, Rs. 8,562 to District Board, Budaun, and Rs. 7,135 to District Board, Farrukhabad, for the improvement of water supplies by providing masonry covering to wells and putting in force or suction pumps. A reference to appendix C to this report will show that out of the total of Rs. 1,00,738 in the hands of the district boards concerned, including the balances of previous years (except in the case of Saharanpur and Budaun) only a sum of Rs. 15,269 was spent during the year. It is understood that the attention of the district boards concerned has been drawn by the Board of Public Health to this small expenditure.

**Rural sanitation.**

84. Grants sanctioned by the Board of Public Health for carrying out sanitary improvements through village panchayats aggregated Rs. 31,603. As in the last year, allotments were made to all commissioners of divisions for distribution to panchayats on conditions, firstly, that no grants are made for roads, secondly, that ordinarily they should be for improvement of wells, or of springs in the hills, used for drinking purposes, filling of insanitary hollows and small sanitary improvements, and thirdly, that preference should be given to panchayats which contribute towards the cost.

**Village panchayats.**

85. The recommendations of the Leper Committee have not been carried out owing to the paucity of funds. Government have sanctioned a grant of Rs. 15,000 to the Maclaren Leper Asylum, Dehra Dun.

**Leprosy.—The Leper Committee.**

86. All the important fairs and religious gatherings held in the United Provinces during 1923 passed off without any untoward incidents and infectious disease was conspicuously absent even in sporadic form.

**Important fairs.**

The medical and sanitary arrangements of the Magh Mela, Allahabad, the Dikhauti fair at Hardwar, the Ram Naumi and the Sawan Jhula fairs at Ajodhya, the Dadri fair at Ballia, the Tigri fair in the Moradabad district, the Garhmuktesar and Nauchandi fairs in the Meerut district and the Shahkumber Devi fair in the Saharanpur district were supervised by Assistant Directors of Public Health.



Magic lantern demonstrations were given at a number of fairs in the province during the year under report by the Assistant Hygiene Publicity Officer and his staff.

87. The Director-General of Observatories has kindly furnished the following brief note on the principal meteorological and weather conditions in these provinces :—

Principal meteorological and weather conditions.

*The cold weather period, January and February.*—In January weather was nearly dry in the United Provinces East, while in the United Provinces West rainfall was in large defect. In February, on the other hand, rainfall was more than twice the normal amount owing to the southerly track followed by most of the western disturbances of the month. Cloud amount was in large defect in January; in February both cloud proportion and humidity were above normal, and maximum temperature below it.

*The hot weather period, March to May.*—The months of March and April were almost dry and the total fall in May was in large defect. Skies were accordingly much less clouded than usual. In May humidity was generally in defect and maximum temperature was above normal in the east of the division.

*The monsoon period, June to September.*—The monsoon was not effectively established in the province in June; on the 17th and 18th there was a short-lived extension into the eastern districts and during the rest of the month occasional local showers were received in this area and in the Kumaun hills. The total rainfall of the month was consequently in large defect, this June being indeed the driest on record in the United Provinces. The monsoon advanced up the Gangetic plain in the beginning of July, and, but for a definite weakening in the second week, was fairly active throughout the month; the total amount of rain was normal in the United Provinces East and in slight defect in the United Provinces West. A vigorous monsoon prevailed during August, and in the first week there were some heavy falls in connection with a depression from the bay. The total rainfall of the month was in moderate excess throughout the province. In the first fortnight of September the monsoon was unusually weak, but in the last ten days two depressions from the bay caused widespread and very heavy rain; thus the total rainfall of the month was in large excess. The Gumti was in high floods at the end of the month and inundated Lucknow and the surrounding villages. The percentage departure from the normal of the rainfall in the two divisions were :—

Sub-divisions.	June.	July.	August.	September.	Total for the period.
United Provinces East ..	—71	—3	+25	+44	+6
United Provinces West ..	—86	—21	+32	+43	+1

In June cloud amount and humidity were in moderate defect, and temperature was in large excess. These elements were roughly normal in the other months.

*The retreating monsoon period, October to December.*—The second of the two depressions that appeared in September continued to cause



widespread and locally heavy rain in the beginning of October; but with its weakening and disappearance the monsoon retreated from the province on the 4th. The total rainfall of October was in large excess, while in November it was in large defect. Western disturbances gave widespread and unusually heavy rain for the time of year in December, and the month's fall was in very large excess; in the United Provinces West it was  $6\frac{1}{2}$  times the normal amount. There was more cloud than usual in the west of the province in October and December; on the other hand cloud proportion was in defect in the east in December. Humidity was generally in excess in October and December. Maximum temperature was below normal in October, while the minimum was above the average in December.

88. The work of my office has again been superintended by my Head Office. Assistant, M. Hafiz Mohi-ud-din, who is also Secretary of the Board of Public Health, in the most efficient manner. M. Abdul Hakim, my head clerk, Babu Brij Lal, head of the sanitation section, and M. Tahir-uddin, head clerk of the epidemic branch, have also carried out their duties to my entire satisfaction.

C. L. DUNN, D.P.H.,  
LT.-COL., I.M.S.,  
*Director of Public Health, United Provinces.*

LUCKNOW :  
*The 16th April, 1924.*







# CHART SHOWING UNIFORM SEASONAL VARIATION OF PLAGUE IN THE UNITED PROVINCES FROM 1903 TO 1923

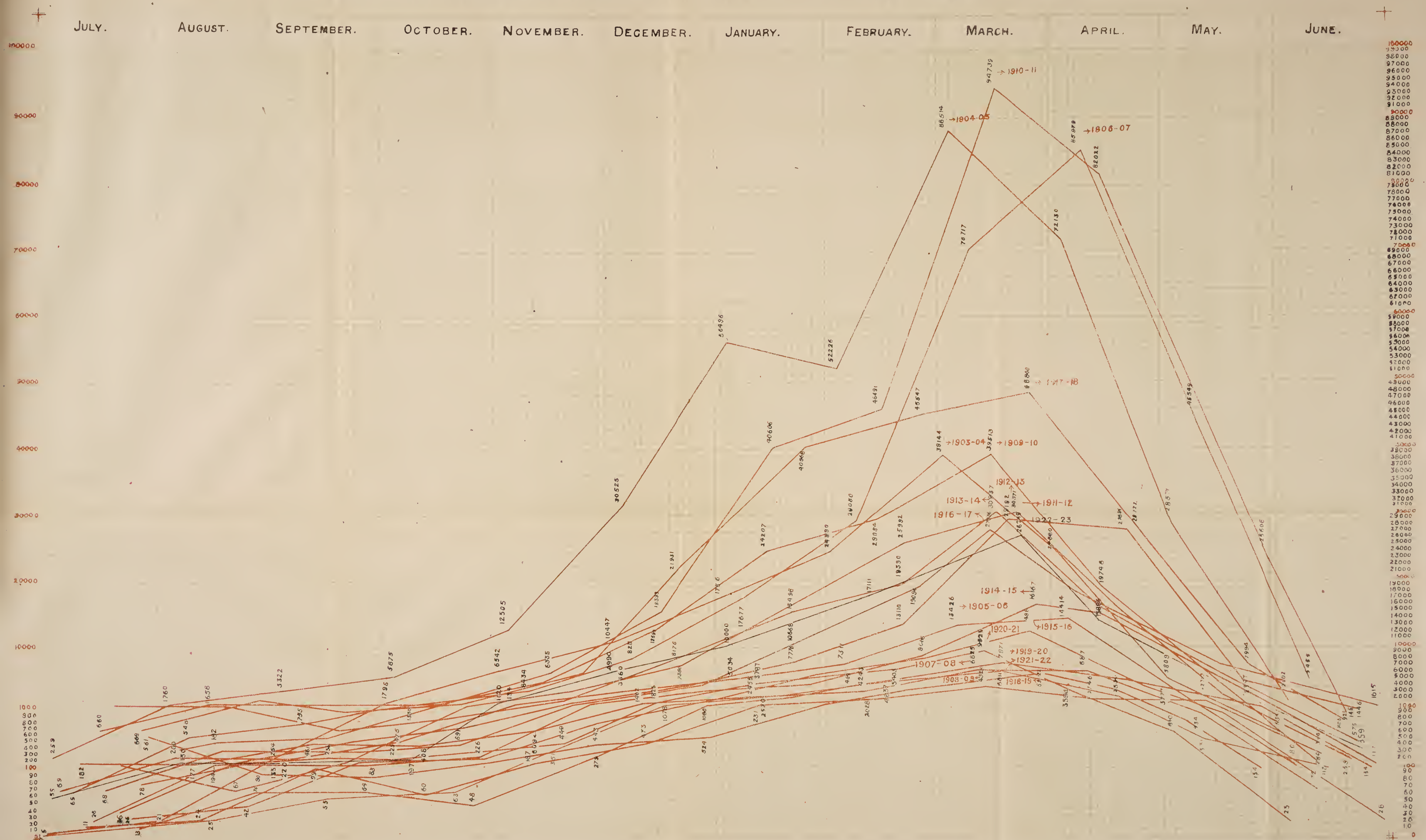
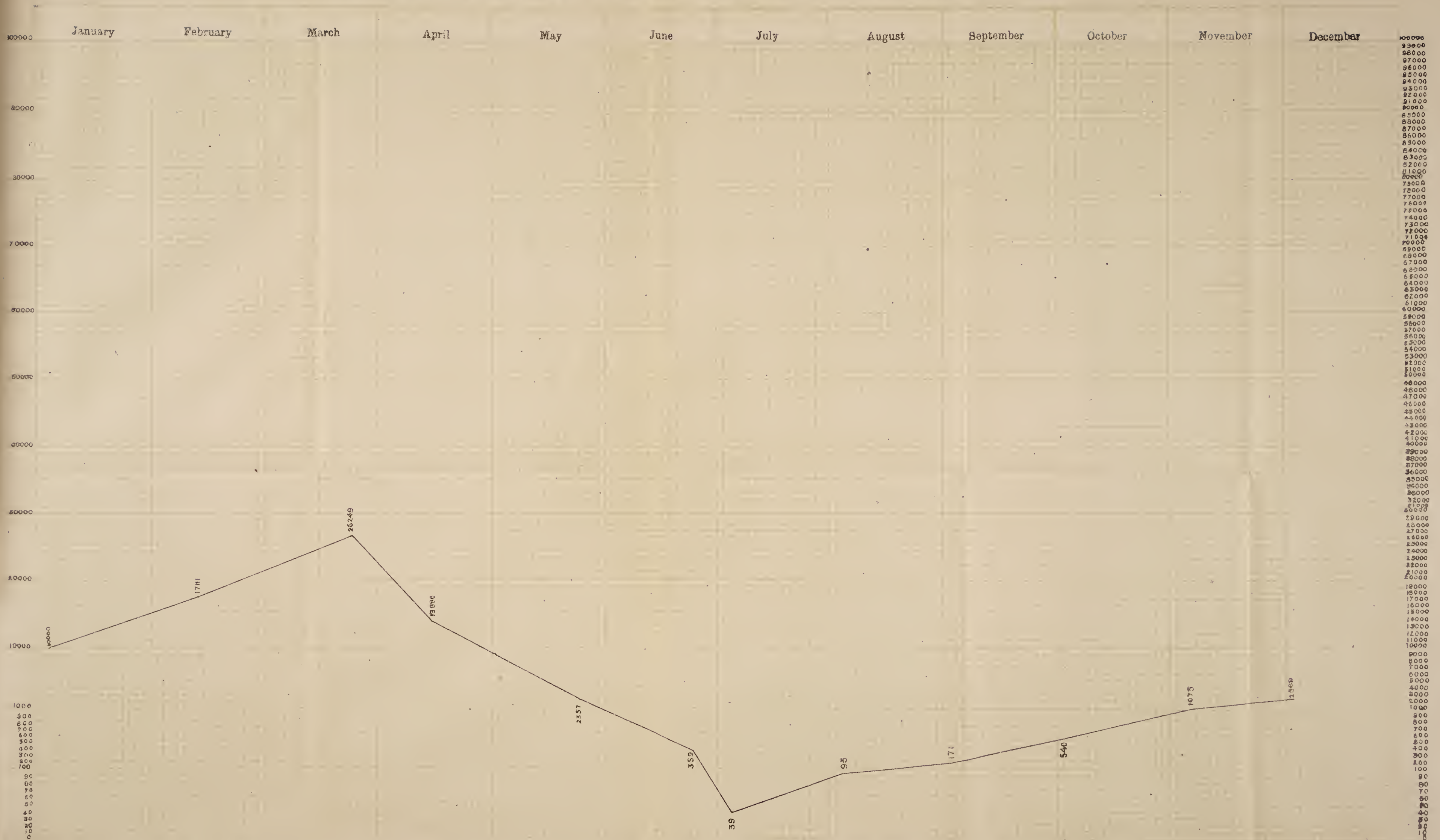








CHART SHOWING UNIFORM SEASONAL VARIATION OF PLAGUE IN THE UNITED PROVINCES FOR 1923.









*Errata slip to the Twenty-Ninth Annual Report of the Superintending Engineer, Public Health department for the year ended 31st March, 1924.*

Station.			Appen- dix no.	Item no.	For	Insert or correct.
Allahabad	..	..	I	20	418	373
Benares	..	..	I	24	2,82,562	1,99,793
			"	25	5,16,413	4,33,644
			"	28	2.04	1.44
			"	29	3.73	3.13
			"	37	1.75	1.15
			"	38	2,42,732	1,59,963
			II	I and S. F. charges.	2,82,562	1,99,793
			"	Grand Total ..	5,16,413	4,33,644
			VII	13	3.73	3.13
			VII	15	41.63	34.96
			VII	17	19.57	12.90
			VIII	23	2.04	1.44
			"	24	3.73	3.13
			"	26	282.56	199.79
			"	29	—242.73	—159.96
			"	30	—6.83	—4.50
Mussoorie	..	..	I	5 (a)	} 68,699,000	10,001,000
				(b)		13,740,000
				(c)		41,524,000
				(d)		3,434,000
			I	10	..	3.07
			"	11	..	11.50
			"	22	..	nil
			"	24	32,996	32,976
			"	25	74,950	74,930
			"	38	17,417	17,397
			II	I and S. F. charges.	32,996	32,976
			"	Grand Total ..	74,950	74,930
			III	Col. 2	} nil	4,79,754
			"	" 3		3,77,403
			"	" 4		1,06,010
			"	" 5		9,63,167
Totals	..	..	III	Col. 2	nil	1,11,05,050
			"	" 3	nil	95,35,438
			"	" 4	nil	9,11,958
			"	" 5	nil	2,15,52,446
			VII	15	78.43	78.41
			"	17	18.23	18.21
			VIII	2	nil	4.79
			"	3	nil	9.63
			"	26	32.99	32.97
			"	29	—17.41	—17.39
			"	30	nil	—1.80
			IX	7	8,784	8,748
			"	17	83.25	76.36
			X	1 Public light- ing.	Not charged for.	Re. 1 per 25 C. P. lamp.
			"	W. S. pumping	Ditto	Rs. 18,432, re- presents 2/5th charges for electric work main- tenance.
Naini Tal	..	..	XII	XIV	2.01	1.65
			XII	XIV	3.47	5.73







**Twenty-ninth Annual Report of the Superintending Engineer,  
Public Health department, United Provinces, for the year  
ended 31st March, 1924.**

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*Staff.*—The post of the Superintending Engineer, Public Health department, was held throughout the year by Mr. G. McC. Hoey.

Mr. P. S. Viswanathan acted as Personal Assistant to Superintending Engineer throughout the year.

The following officers: Mr. W. Saise, Mr. S. E. Platt, Mr. G. E. Rhodes, and Mr. G. K. Pillai, held charge respectively of the First, Second, Third, and Well-Boring Operations divisions throughout the year.

Mr. F. D. Tunncliffe, Executive Engineer, was attached to the Superintending Engineer's office for project work.

In addition to the above, two Assistant Executive Engineers, nine Assistant Engineers, twenty-four subordinates, and the requisite number of draftsmen and clerical staff were also employed in this department.

Mr. F. J. Mallett, Mechanical Engineer for water-works, was responsible for regular inspections of all water-works plant and matters pertaining to their maintenance throughout the year.

The Mechanical Engineer acted as Electric Inspector to Government as a leave arrangement, for a period of six months and also visited Rajputana to advise on Ajmere water-supply.

The Mechanical Engineer was also responsible for a note on tube well work which epitomises all the experience gained in recent years. This note was printed and distributed.

The Superintending Engineer inspected all important municipal works and the Mechanical Engineer for water-works visited all open water-works and rendered valuable assistance by systematic inspections and advice.

*Expenditure.*—The sum of Rs. 21,22,760 was spent on construction (original works) and Rs. 13,87,214 on maintenance and repairs of open water-works under Superintending Engineer's supervision.

The establishment charges of this department for the year under review amounted to Rs. 3,67,000. An amount of Rs. 10,834 was earned in fees on projects completed during the year and an amount of Rs. 11,388 was realised. Fees due from local authorities amount to Rs. 40,455.

Fees earned for construction carried out departmentally amounted to Rs. 1,19,091.

*General.*—Type designs, with specifications and conditions of contract, for hand-pumped well-supplies were prepared, and printed under the auspices of the Board of Public Health for distribution to local authorities for use in village sanitation.

Standard forms of contract for the special work undertaken by this branch have been prepared by the Assistant Government Advocate in collaboration with Mr. F. D. Tunncliffe and these forms have been sanctioned by Government.



*Water-works (General).*—The problem of controlling water-supply is as serious as ever and although this matter has been frequently brought to the notice of the various boards, there is little improvement to report. The statement made in the last and former year's report concerning the waste of water applies equally to the year under review. To economise expenditure boards are driven to devices which lead to deterioration of their systems and few boards were possessed of sufficient courage to take any steps to restrict waste. The number of private connections is rapidly growing and yields only a fraction of the revenue required to cover the cost of water supplied. It is not understood that the water which passes down the gutters of the large towns from taps which are never turned off, represents money which has to be found from the rates.

The present boards were elected only a few months ago and so have not yet had time to set measures on foot, and it is gratifying to note that several of the chairmen are alive to the situation. It is hoped that they will be successful in bringing their boards to view this matter of water-supply control as a most important duty to the public.

At the instance of the Mechanical Engineer and with the approval of the Board of Public Health, statements were drawn out showing the demands for water rates and taxes which are made quarterly by the various boards, against the income realized. These returns have been approved by Government and some boards have already submitted them. From the information so far received in these returns it is evident that large sums of revenue remain in arrears and may never be recovered. In some cases the arrears amount to as much as seventy-five per cent. of the demands and the reluctance of the boards to take effective steps to collect these arrears was marked.

The Mechanical Engineer has on numerous occasions brought to notice the very inferior class of coal used by the boards and the enormous consumption of fuel for the output in work done by the plant. Rate-payers lose large sums annually in this respect. Until the boards adopt better methods in placing their coal fuel contracts such losses are likely to continue. The average daily supply in several municipalities has now reached the figure of 30 gallons per head. Even allowing for the demands of local industries this quantity is high and should suffice for cities which are fully provided with water-flushed drainage systems. Only wealthy communities can afford a larger supply than this. Several municipalities such as Allahabad, Cawnpore, Benares, and Lucknow have projects for re-organisation either in hand or in prospect, and there is a tendency to think that by the addition of larger pumping units the supply will be permanently improved. On the other hand experience has shown that systems which are uncontrolled will absorb excessive quantities of water and no board in this province would be well advised to embark on a project involving any capital expenditure, until its distribution is in thorough control and until its revenue balances annual charges. Boards which undertake extension work without ensuring adequate control, merely increase their indebtedness in return for transitory relief in the supply.

#### MECHANICAL ENGINEER'S INSPECTION REPORTS ON MAINTENANCE OF WATER-WORKS.

*Agra.*—The plant was generally well maintained. The old geared pumps and the L. D. vertical Worthington remain as unreliable for stand-by plant in the unfiltered water pumping, as reported last year.



An order was placed for new hydraulic balancing gear to improve the working and economy of the vertical Worthington pump.

A spare shaft complete with impeller and bearings which was recommended for the centrifugal pump was not obtained. A new casing for the centrifugal pump was received but was not fitted.

The coal supplied was generally satisfactory and was the best obtained by any of the municipal water-works.

Settling tanks nos. 1 and 3 were not cleaned owing to a controversy in regard to the labour employed on this work. A considerable portion of the screen wall of no. 3 tank collapsed owing to heavy silt deposit, and required repairing.

Alterations to the inlet pipes of the sand filters were carried out. Owing to delay in the acceptance of tenders and a reduction in the budget allotment the supply of fresh sand was delayed and the requisite amount not obtained. A sand-washer has been recommended which when put to proper use should result in a saving in sand-washing operations.

Satisfactory repair work was done to the Deacon supply meters with the spare parts obtained. The inter-connection of the high and low zones of supply and the indiscriminate way in which further connections are granted has resulted in a distinct deterioration in the pressure and distribution of the supply generally. The need of new plant to relieve the Diesel centrifugal pumping sets for the unfiltered supply is urgent. But until better control of the distribution system is exercised the Board cannot finance this work and the position continues to deteriorate.

*Allahabad.*—The condition of the plant has generally been improved. Owing to settlement in the river bank, two large cracks developed in the A and B pump suction tunnel, which require pressure grouting.

The settling tanks have not been cleaned for years and there is a great quantity of weed and algae in the tanks and filters. If immediate steps are not taken to clean the tanks, trouble may arise due to decomposition of the algae during the hot weather. Stricter supervision is necessary when the filters are top-scraped to see that deleterious matter is not pressed into the sand beds by the feet of the labourers. The inlet pipes to the filters are being changed as recommended. The repair work to the "B" reservoir and the rendering of the roofs and surface channels for both clear water reservoirs was completed. Extension pieces have been added to nearly all the fire hydrants and the standpost valve chambers on the distribution system have been remodelled as recommended.

The tube wells at Mayo Hall and Daraganj have been constantly in use for several months and have worked satisfactorily.

Owing to the small yield from the Thornhill Road well it has been decided not to use the pumping sets there until a new strainer has been sunk.

The coal obtained throughout the year was generally of poor quality. A coal calorimeter recently purchased by the board should be of great help in checking the quality of coal supplied.

The board after deliberation on the report of the enquiry committee and the application of the water-works engineer to have his case reconsidered, decided to re-appoint him on probation.

*Benares.*—The general condition of the old geared sets at the unfiltered station does not warrant any expenditure other than required to



bore out the barrels and replace the brasses and some minor details of work on the engines and pumps. The Worthington pump is now in a better condition than formerly. The Beam engines and pumps at the filtered station have been maintained in good running order. The tube well air-lift pumping plant has given complete satisfaction throughout the year, but the new Byron-Jackson deep well pump purchased last year was not put to use.

One settling tank was cleaned and a considerable reduction in cost was effected by employing mechanical haulage for removing the silt. No alteration to the inlet pipes of the filters was carried out as recommended. The sand on the filter beds requires regrading.

The board have not accepted the Board of Public Health's offer of help to control waste of water. Although both the hours of supply and consumption for trade purposes are the least of any water-works, the supply per head is the highest in these provinces. A recent resolution of the board to carry through the re-organisation work on condition that Government affords a free grant to cover the capital involved and also remits existing sinking fund and interest charges, shows that the situation at Benares regarding water-supply is not yet realised.

Although the improvement effected in the condition of the plant has enabled the supply to be maintained, the question of the water-works re-organisation is an urgent necessity. Until the distribution is brought into proper control and waste curtailed, the board cannot possibly face the duty of financing the re-organisation work. Certain areas in this city draw over one hundred gallons per head per diem, while larger and more distant areas are distressed for want of water.

*Cawnpore.*—The condition of the plant and the works at both stations has been improved. The water-works superintendent resigned and another has been appointed in his place. An endeavour also is being made to place the management on a better footing. The coal situation was as bad as any in these provinces and the coal-supply at times caused some anxiety.

The question of the re-organisation of the water-supply was discussed at a special meeting convened for the purpose on the 2nd March, 1924 and it is hoped that this subject will be given final consideration and steps will soon be taken to set work going.

The No. 1 settling tank was not cleaned out although it is heavily silted up. The mechanical sand-washer was set to work satisfactorily. Additional sand is required on two of the slow sand filters. The Puech-Chabal filters have worked well.

The municipal engineer has investigated the question of waste prevention in certain areas and has estimated the waste to amount to 40 per cent. of the supply. As in the case of Benares, the proper control of the distribution and waste prevention must be an essential preliminary to any re-organisation work involving expenditure of capital.

*Lucknow.*—The pumping plant at both the stations has been kept in fair order. The headers required for the Babcock and Wilcox boilers were delivered, fitted, and passed by the boiler inspection department.

The quality of coal supplied was very inferior for the greater part of the year.



The Paterson filtration plant was set to work from 1st November, 1923, and has given consistently good results. This plant was of great value during the recent floods in maintaining the supply. The slow sand filters have been laid off for overhauling and renewal of sand, and will again be brought into use as the demand for water increases in the hot weather.

The plant at Gaughat, although the floods almost reached the fire bars of the boiler furnaces and although the pumps were submerged continuously for over a week, was kept running by the efforts of the water-works superintendent—a creditable performance. The Executive Engineer, Third division, has tendered sound advice to the municipal board to guard against stoppage in the supply in future floods.

The question of waste prevention is still in abeyance. Unless this work is taken up at once in earnest by the board, the benefit of the new pumping plant as regards pressure and increase in the supply will only be temporary, and the extra water will soon be absorbed by uncontrolled connections.

*Meerut.*—The pumping plant was well maintained. The tube well sunk has not yet been put into use. The shortage of water was acute in Meerut until the new tube wells and pumping plant established by the cantonment authorities relieved the situation. It now appears that cantonments will be able to meet all their own demands for water from their new tube wells and the municipal board may lose considerable revenue. The settling tanks and filters were maintained in good condition.

*Mussoorie.*—The pumping plant at both stations was found in good condition and is as well maintained as any in these provinces.

The addition of anchorages has improved the working of the rising mains. Two of the masonry reservoirs required repairing.

The need for a central workshop cannot be over-estimated and it is hoped the board will give the matter the attention necessary.

Recommendations have been made and are being put into effect for separating the capital and revenue expenditure and receipts on the water and electric-supply systems.

*Naini Tal.*—The old steam pumping plant was overhauled to act as a "stand-by." In September final tests were carried out on the electro-motor pumps, and they were handed over to the municipality having complied with the guaranteed efficiencies of the manufacturers, Messrs. Mather and Platt.

*Jhansi.*—It is satisfactory to record that the board took steps to carry out the recommendations made in previous reports and nearly Rs. 2,000 has been spent on spare parts. One engine and pump has been overhauled and is now in a much better condition. At one time during the year there was some trouble in getting the contractor to supply coal contracted for, but this situation has since been cleared up. The present daily consumption of coal is a decided improvement on the average consumption for last year.

*Muttra.*—The plant was well maintained, and reflects credit on the superintendent and the subordinate staff.

In the matter of waste prevention, due to leaky taps and fittings, this municipality pays greater attention than any other, but the increase in the number of connections and the consumption in the low-lying districts calls for great care on the part of the board or the uncontrolled demand may outgrow the yield of the tube wells.



*Mirzapur.*—The works were found in good order generally, but a few minor repairs were recommended and the inlet regulating valve in the service reservoir was to be overhauled. It was also recommended that the venturi meter should be moved from its present unsatisfactory position and be placed upon the town supply main.

#### ORIGINAL WORKS.

*Tube Well.*—The tube well at the District Jail, Aligarh, has been satisfactorily completed.

The tube well at Farrukhabad has been completed and on test yielded 300 gallons per minute under a depression head of less than 10 feet.

Moradabad tube well has been completed and afforded under test 283 gallons per minute with a depression of 9 feet 3 inches.

Firozabad tube well has been completed and yielded 260 gallons per minute with a depression of 15 feet.

Tube wells at Kosi, Sikandra, and Shahdara are nearing completion.

*Magh Mela Water-Supply.*—A temporary water-supply for pilgrims attending the Allahabad Kumbh Mela was successfully provided and maintained during the mela season at a cost of Rs. 78,880.

*Lucknow Water-Supply Re-organisation, Rs. 45 lakhs.*—The Paterson filtration plant at Aishbagh has been satisfactorily completed and is delivering three million gallons of filtered water daily to the city: the guaranteed standards of purity have been maintained. The generating station, including buildings and machinery, has been completed, as well as the 175 feet masonry chimney. The overhead transmission lines are almost complete, the boilers have been tested and put under steam, and the plant is at present under test before it is put to regular use and handed over to the municipal board.

*Naini Tal Hydro-electric and Water-Supply construction, Rs. 20·74 lakhs.*—The electric supply is being satisfactorily maintained and the water-supply has been electrically pumped since September, 1923. This work is now completed.

*Fyzabad Water-Supply, Rs. 9·94 lakhs.*—All the rising mains and distribution work have been completed and the contract for the generating and pumping machinery has been placed with Messrs. Mather and Platt. Many tenders were received for this work and the competition in price was keen. The masonry of the raised reservoir is almost complete and the steel work has been delivered at site.

*Gola Gokarannath Water-Supply, Rs. 1·58 lakhs.*—This work was delayed several months by unprecedented floods and certain supplementary work has been necessitated. The pumping plant has arrived and it is hoped this work will be completed before the rains break.

*Mussoorie Water-Supply.*—Construction is in progress on the Bilharu pumping station which the board are carrying out by their own agency, under the supervision of this branch.

*Other works.*—In addition to above, works on the Ramnagar water-supply and Agra and Muttra water-supply improvements have been completed and handed over to the respective boards.

#### PROJECTS.

*Dehra Dun Water-Supply.*—An estimate for supplying water to Dehra Dun from the Baldi springs has been prepared and sanctioned, and work on this supply will be commenced as soon as allotment is received.



The municipal board have to thank their chairman, for it was due to his efforts that this very urgent work has already been set on foot.

*Jhansi Water-Supply.*—The Railway and Military authorities have agreed to pay their shares of the project and the municipal board are at present engaged in investigating means of financing the work.

*Cawnpore Water-Supply Extension.*—The Consulting Engineer is revising his proposals for this work in the light of criticisms made. The work on the rapid filter plant extensions and the new slow sand filter has been held up owing to adverse inspection reports on the nature of the work being carried out.

*Drainage, General.*—A noticeable feature concerning the drainage of the large cities is the reluctance of the boards to exercise the powers they possess under the Act to insist on private houses being connected to the sewers even where a nuisance exists. The extension of drainage systems is hampered by a shortage in water-supply and lack of funds to meet capital cost of sewer construction. The question of improving the surface of public thoroughfares is also a serious one for most municipalities; for as it is impossible on score of cost to provide connections to all buildings, court-yard drains must of necessity be connected by means of kerb and channels to gullies on the sewer. Unless first class metalled road surfaces exist and road patties are either metalled or paved, kerb and channel drains, no matter how carefully laid, usually fail by the erosion of the earthen surface alongside the drain. The question of providing suitable road surfaces at a reasonable cost is one of the most serious questions facing the various municipalities.

The pail dépôt system of disposing of night-soil is growing in favour and perhaps affords the only solution of this problem during the transition period, until towns are fully served with sewers.

An endeavour will be made during the coming year to collect information regarding the running costs of sewage farms and the revenue derived therefrom for incorporation in the appendices of this report.

*Allahabad Drainage.*—The terms of an agreement for utilising sewage have been settled between the Agricultural Institute, Allahabad, and the municipality; but the acquisition of land for sewage treatment is under consideration.

An estimate for diversion of the emergency outlet on the Jumna has been prepared by the municipality and sanctioned by Government, and work has already commenced.

*Cawnpore Drainage Works.*—Several visits were paid by officers of this branch and the municipal board were furnished with copies of the inspection reports.

*Drainage Construction, Lucknow Sewage Disposal, Rs. 9.33 lakhs.*—This work is now almost completed. The alternating current motor-driven pumps, transformers, and switch gears and high tension lines have been completed, and the plant will be put to use as soon as the Aishbagh work is tested.

The phenomenal floods which occurred in the Gumti in October, 1923, have hampered progress, though no damage has taken place to this work.

It is unsatisfactory to record that although a large grant was made to the municipality to construct an intercepting sewer along the right bank of the Gumti and although this sewer was completed many months ago, yet



no steps have been taken to connect to it the numerous drains which discharge into the river. The state of the Gunti is a danger to the public, besides being offensive, and it is a pity the municipality cannot set on foot the work of connecting up the foul water drains as funds have been made available and the intercepting sewer is lying disused.

*Muttra Drainage Work.*—This has been completed as well as work on the disposal of sewage at Swamighat. Work on the sewage pumping project for Muttra has been sanctioned and funds allotted. Tenders are in process of being invited for this work.

*Rikhikesh Drainage Improvement.*—This work has been satisfactorily completed.

*Dehra Dun Drainage Improvements.*—The municipal board have succeeded in getting several obstructions and encroachments on the surface drain in the main bazar removed and they have on their own initiative extended the area of their sewage farm.

*Moradabad Flushing Scheme.*—The tube well work has been satisfactorily completed and tested and tenders have been invited for the supply and erection of pumping plant and for providing and laying pipes.

*Infectious Diseases Hospital, Muttra.*—This work has been completed.

*General remarks.*—Much work has to be undertaken which would in Europe be entrusted to municipal staff under advice from consulting engineers. This course is rendered necessary because municipal boards generally have not yet succeeded in employing competent technical staff. The divisional engineers of this department have no enviable task in satisfying all the demands of local authorities and at the same time adhering to Code regulations. Most of the capital involved in original works is still found by Government in grants-in-aid or in loans, and the financing of works is one which offers great difficulty to local bodies, as it involves question of taxation.

Much of the opposition of the public to increased taxation would be removed if the public possessed sufficient confidence that the money raised would be spent to the best advantage. Boards would do well to study the proper means of carrying out public works and with this end in view they should not be averse to appointing properly qualified and experienced staff. Tenders for all works should be advertised and the sealed tenders opened at full meetings of the board. More attention is also required to terms of contract and specifications for works, to avoid disputes.

The staff of this department has been reduced to the minimum with a view to retrenchment and several projects of less urgency have therefore been delayed. The percentage which the staff charges bear to the value of the work undertaken is a reliable measure of the efficiency and the figures recorded in this and previous reports are favourable when compared with establishment charges elsewhere in India and abroad.

The writer is unable to summarise the results of the year's maintenance figures, as the appendices to this report cannot be completed by the 1st of April—the date on which he proceeds on leave—but his successor, Mr. S. E. Platt, will add a note on this subject.

Superintending Engineer wishes to record his appreciation of the services of the staff of this department during the year in work which



required both tact and perseverance ; in particular, he would mention the Mechanical Engineer and Executive Engineers of First, Second, and Third divisions. His Personal Assistant and the Executive Engineer, First division, also deserve special mention ; the latter for his rapid and thorough project work during the year.

G. McC. HOEY,

M. INST. C.E.,

*Superintending Engineer,*

*Public Health department,*

*The 31st March, 1924.*

*United Provinces.*

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*Water rates.*—During the year 1923-24 there has been a considerable and almost general improvement in both the demand and collection of water rates and in the reduction of expenditure on the maintenance of water-works. In the year 1922-23 the total loss incurred by the eleven principal water-works in the province (excluding Allahabad) was stated in the last year's annual report to be almost 6½ lakhs. If this sum is corrected to allow for non-payment of instalments on loans the deficit amounted to about 6·75 lakhs. During the year under review the Benares Municipal Board has paid the arrears of last year's loan charges and also the charges for the present year. The Allahabad Municipal Board has paid Rs. 35,000 against loan charges which last year amounted to Rs. 1,34,724. Making allowances for these in the total loss incurred by the 12 boards (including Allahabad) the total loss in 1923-24 is about 2·5 lakhs showing the great improvement made during the year. This is partly due to improvement in the efficiency of the plant and to reduction in the cost of coal.

Great difficulty has been experienced in the preparation of the appendices of this report owing to the dilatoriness of certain boards in supplying the required information. In some cases it has been necessary to send an officer of this department to collect the necessary information from the offices of the municipal board concerned. In other cases the details were only supplied after many letters, reminders and telegrams had been despatched in an endeavour to collect the necessary information from the municipalities having open water-works.

S. E. PLATT,

*Superintending Engineer,*

*Public Health department,*

*The 18th June, 1924.*

*United Provinces.*







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## APPENDICES.

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## Statement of operations of various water-works

Particulars.	Agra.	Allahabad.	Benares.	Cawnpore.
<i>Population.</i>				
1. By census of 1921 in municipality ..	163,902	145,653	195,133	195,133
2. By census of 1921 in Cantonments ..	22,044	11,567	3,314	21,000
3. Inhabitants drawing their supply from mains.	185,946	157,220	198,447	216,400
<i>Consumption of water.</i>				
4. Metered Supplies :—				
(a) Cantonments .. ..	86,409,000	93,703,500	980,000	18,341,000
(b) Trade .. ..	100,977,000	51,433,000	Nil	287,867,000
(c) Domestic (Bungalows, etc.) ..	29,275,000	89,877,500	385,700	271,330,000
(d) Buildings .. ..	103,000	1,323,000	2,472,300	17,258,000
Total Metered Supplies. Gallons ..	216,769,000	236,342,000(4)	3,838,000	594,797,000
5. Unmetered Supplies :—				
(a) Domestic (Assessment or ferrule)	1,051,214,000	703,666,000	978,618,300	} 1,295,021,000
(b) Municipal purposes (road-watering, Irrigation and flushing, etc.)	175,830,500	237,617,000	879,422,500	
(c) Standposts .. ..	206,418,500	266,654,000	350,400,200	321,200,000
(d) Buildings .. ..	24,071,000	15,138,000	Nil	..
Total Unmetered Supplies, Gallons..	1,457,534,000	1,193,075,000(A)	2,203,444,000	1,716,221,000
6. Total quantity pumped during year (Items 4 and 5.)	1,674,303,000	1,429,417,000	2,212,279,000	2,311,019,000
7. Daily average supply .. ..	4,574,593	3,905,512	6,044,477	6,314,200
8. Maximum daily average in any one month.	4,830,181	4,565,695	6,720,049	7,630,400
9. Consumption per head per day for trade alone.	1.43	.89	Nil	3.00
10. Consumption per head per day for municipal purposes and buildings.	2.94	3.90	12.14	} 25.00
11. Consumption per head per day for domestic purposes.	20.18	20.05	18.32	
12. Total consumption per head per day (Items 9, 10 and 11).	24.60	24.84	30.46	29.00
13. Hours of daily supply .. ..	10.00	11.60	7.90	16.00
<i>Lift of pumps.</i>				
14. From river to settling tanks. Feet	47.00	110.02	99.35	110.00
15. From filtered water pumps to town distribution. Feet.	143.91	76.12	85.39	76.00
16. Total lift. Feet .. ..	190.91	186.14	184.74	186.00
<i>Supply connections Assessment.</i>				
17. Total number of connections made during 1923-24.	395	338	542	395
18. Total number of connections ..	3,666	5,111(B)	11,663(B)	6,683

(B) Corrections intimated by C. M. B.

(4) Daragunj Tube Well Pumping 66,415,000 gallons ; Mayo Hall Tube Well Pumping 39,244,000 gallons.

(A) Estimated figure.

(5) Corrected figure as supplied this year 1923-24.



D. I.  
the United Provinces for the year 1923-24.

Lucknow.	Meerut.	Mussoorie.	Naini Tal.	Dehra Dun.	Jhansi.	Mirzapur.	Muttra.
217,167	77,711	12,943	16,517	34,092	54,385	54,994	42,615
23,399	44,898	2,346	802	Nil	12,069	Nil	10,235
201,334	122,609	15,289	17,319	34,092	25,000	38,400	42,615
4,882,000	151,401,000	411,000	1,783,800	..	‡	Nil	Nil
3,292,800	7,438,500	Nil	159,000	..	904,600	9,875,500	3,212,000
1,940,400	159,500	12,448,000	11,837,700	1,175,000	1,901,100	22,964,500	Nil
0,067,400	1,990,000	Nil	239,800	..	Nil.	Nil	Nil
0,182,600	160,989,000	12,859,000	14,020,300	1,175,000	2,805,700	22,840,000	3,212,000
3,655,400	75,865,000	68,699,000	364,700	..	1,722,500	25,765,200	183,377,500
38,099,300	3,000,000		94,000	..	1,564,800	7,084,000	60,378,000
23,923,000	199,728,000		20,440,000	64,735,000	51,816,000	132,053,700	87,600,000
119,700	..		40,000	..	Nil	Nil	2,566,500
5,797,400	278,593,000	68,699,000	20,938,700	64,735,000	55,103,300	165,903,000	333,922,000
35,930,000	429,582,000	81,558,000§	34,959,000†	65,910,000.	57,909,000	198,743,000	337,134,000
2,830,546	1,201,045	222,835	95,516	180,082	158,221	543,014	921,131
3,525,833	1,602,239	234,105	269,170	180,086	198,627	625,000	1,367,032
·04	·17	Nil	·025	..	·098	·70	·20
2·01	·11	..	·059	..	·171	·50	4·03
12·01	9·52	..	5·431	5·28	6·058	12·92	17·37
14·06	9·80	14·57	5·515	5·23	6·327	14·13	21·60
16·5	14·00	20	12·63	24	10	24·00	10·12
112·87	15·16	Main 1311·5	H.L. 1144·47	Gravity	Nil	Gravity	Nil
62·10	107·92	Aux. 639·0	I.L. 451·88 L.L. 254·06	Supply	165·00	Supply	137
174·97	122·08	Average 1466·22	Average 736·13	..	165·00	..	137
196	114	6	Nil	..	(9)7	370	169
5,586	1,160*	(a)1,164	5	3	45	1,307	883

\* Five metered connections transferred.

† Excluding gravitation supply 13,297,170 gallons.

‡ Cantonments have their own supply.

§ Gravitation supply 4,730,400 gallons excluded.

(a) Seven shops have been demolished.

(9) Old connections not accounted for last year.



## Statement of operations of various water-works

Particulars.	Agra.	Allahabad.	Benares.	Cawnpore.
<i>Metered.</i>				
19. Number of house connections made during 1923-24.	5	11	2	
20. Total number of connections ..	101	418(B)	5	32
21. Number of trade connections made during 1923-24.	Nil	Nil	Nil	
22. Total number of trade connections ..	34	45	Nil	10
<i>Annual charges and cost of water supplied.</i>				
23. Maintenance charges, Rupees ..	1,61,643	2,09,320	2,33,851	3,07,500
24. Interest and sinking fund charges, Rupees.	65,215	35,000	2,82,562*	78,000
25. Total charges, Rupees ..	2,26,858	2,44,320	5,16,413	3,86,500
26. Cost per 1,000 gallons per 100 ft. lift, annas.	·81	1·26	·91	1·00
27. Cost per 1,000 gallons maintenance charges, annas.	1·54	2·34	1·69	2·00
28. Cost per 1,000 gallons interest and sinking fund, annas.	·62	·39	2·04	
29. Total charges per 1,000 gallons (Items 27 and 28), annas.	2·16	2·73	3·73	2·00
<i>Income from water-works.</i>				
30. Water rate recovered (Assessment) Rupees.	1,52,440	2,64,907	2,45,758	3,45,000
31. Sale of water by meter, Rupees ..	79,280	69,480	9,941	82,500
32. Other receipts, Rupees ..	3,697	3,406	17,932	8,000
33. Total income (items 30, 31, and 32), Rupees.	2,35,417	3,37,793	2,73,631	4,35,500
<i>Income and working charges.</i>				
34. Receipts per 1,000 gallons supplied through meter, annas.	5·85	4·70	8·12†	2·00
35. Receipts per 1,000 gallons supplied through assessment rating, annas.	1·71	3·60	1·91	3·00
36. Receipts per 1,000 gallons supplied on total consumption, annas.	2·25	3·78	1·98	3·00
37. Loss per 1,000 gallons supplied (Items 29 to 36), annas.	Profit ·09	Profit 1·07	1·75	Profit 0·00
38. Deficit on year's working, Rupees ..	Profit 8,559	Profit 93,473	2,42,732	Profit 48,600
Meter rent included in item 31, Rs. ..	853	2,890	..	7,700

\* Includes arrear payment for last year.

† Worked on the actual receipt Rs. 1,949,

(B) Corrections intimated by C. M. B.

(5) Corrected figure as supplied this year 1923-24.



I.  
the United Provinces for the year 1923-24.

cknow.	Meerut.	Mussoorie.	Naini Tal.	Dehra-Dun.	Jhansi.	Mirzapur.	Muttra.
—30	..	14	11	Nil	Nil	—245	..
220	12	430	262	14	3	145	..
..	..	Nil	Nil	Nil	Nil	33	5
27	12	..	22	Nil	1	150	*9
2,17,925	52,108	41,954	82,104	6,410	15,554	11,558	47,062
1,26,729	43,152	32,996	23,014	7,945	2,924	23,012	10,966
3,44,654	95,260	74,950	1,05,118	14,355	18,478	34,570	58,028
1·92	1·54	·56	5·10	..	2·60	..	1·62
3·36	1·90	8·23	37·58	1·55	4·29	·93	2·23
1·95	1·57	6·47	10·53	1·93	·81	1·85	0·52
5·31	3·47	14·70	48·11	3·48	5·10	2·78	2·75
1,80,688	8,473†	43,165	41,919	..	7,221	9,872	39,551
89,051	50,367	14,305	21,981	2,508	934	6,487	1,234
10,282	..	63	4,033	..	6	2,536	2,761
2,80,021	58,840	57,533	67,933	2,508	8,161	18,895	43,546
6·77	5·01	17·80	25·08	34·15	5·32	3·16	6·14
3·70	†·49	10·07	35·11	..	2·09	1·19	2·03
4·32	2·14	11·28	31·09	·61	2·25	1·52	2·06
·99	1·33	3·42	17·02	2·87	2·85	1·26	0·69
64,633	36,420	17,417	37,185	11,847	10,317	15,675	14,482
1,903	51	1,955	2,014	139	Nil	1,903	71

\* 18 meters removed.  
† Ferrule rating.



## Annual maintenance accounts

Particulars.	Agra.	Allah- abad.	Benares.	Cawnpore.
	Rs.	Rs.	Rs.	Rs.
<b>I.—Establishment—</b>				
(a) Pumping .. .. .	16,734	..	34,309	20,834
(b) Workshops .. .. .	4,466	..	8,667	13,500
(c) Settling tanks and filters .. .. .	487	(8)59,234	440	1,600
(d) Inlet chambers, well and grounds, etc. .. .. .	..	..	..	500
(e) Distribution .. .. .	9,281	..	11,820	12,400
(f) Clerical staff .. .. .	2,088	..	3,364	11,900
(g) Menial staff .. .. .	3,028	..	2,717	12,100
(h) Office contingencies .. .. .	1,367	496	1,271	2,000
(i) Rent .. .. .	298	843	270	500
<b>II.—Fuel, lubricants and stores—</b>				
(a) Fuel (coal, fuel oil or electric energy) .. .. .	(1)81,064	(2)1,10,334	(3)1,23,264	(4)1,41,000
(b) Lubricating oil .. .. .	7,177	6,568	5,191	6,200
(c) Waste .. .. .	919	431	1,640	600
(d) Packing .. .. .	744	11,928	1,467	..
(e) Petty stores .. .. .	6,196	2,363	6,642	4,500
<b>III.—Intake—</b>				
(a) Training river .. .. .	1,253	..	..	..
(b) Cleaning channels and wells .. .. .	5,453	2,077	..	..
<b>IV.—Settling tanks and filters—</b>				
(a) Cleaning settling tanks and wells .. .. .	1,243	..	3,899	2,400
(b) Cleaning and renewing filter-beds .. .. .	7,582	..	2,472	700
(c) Purchase of sand .. .. .	7,612	4,741	1,033	4,400
(d) Purchase of Allumino ferric .. .. .	..	935	6,188	11,800
<b>V.—Distribution—</b>				
(a) Pipes and fittings .. .. .	321	374	5,070	3,600
(b) Meters .. .. .	..	654	2	4,600
(c) Standposts or hydrants .. .. .	463	..	..	..
<b>VI.—Repairs—</b>				
(a) To tanks .. .. .	318	..	..	Nil
(b) To buildings and grounds .. .. .	1,495	1,407	1,984	1,800
(c) To machinery .. .. .	777	6,228	9,471	12,100
(d) To rising main .. .. .	..	..	993	1,800
(e) To tools and plant .. .. .	..	..	..	3,800
<b>VII.—Water analyses .. .. .</b>	267	705	1,622	900
<b>VIII.—Cost of water—</b>				
Canal department dues .. .. .	1,000	..	..	33,500
<b>Total .. .. .</b>	1,61,643	2,09,320	2,33,851	3,07,700
<b>Interest and sinking fund charges .. .. .</b>	65,215	35,000	2,82,562	78,900
<b>GRAND TOTAL .. .. .</b>	2,26,858	2,44,320	5,16,413	3,86,600

(1) Includes Rs. 2,770 in excess of consumption.

(2) Cost of fuel oil Daraganj Rs. 2,566. Electrical charges Mayo Hall Rs. 2,873. Includes Rs. 28,339 in excess of consumption.

(3) Rupees 721 less on consumption.

(4) Electrical charges for canal pumping Rs. 13,889 and includes Rs. 13,930 in excess of consumption.

(8) Includes staff for Tube well. Details not supplied by municipality.



D. II.

ter-works during the year 1923-24.

Luck- now.	Meerut.	Mus- soorie.	Naini Tal.	Dehra Dun.	Jhansi.	Mirza- pur.	Muttra.
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
	10,516	4,052	9,866	..	2,371	966	13,498
	..	..	810	..	..	..	1,170
52,946	432	..	..	..	..	132	..
	..	..	..	..	..	..	..
	5,884	1,474	3,318	..	..	4,746	4,080
	2,112	1,510	1,073	1,680	..	638	375
	1,666	1,315	57	3,495	..	95	894
830	1,892	429	276	110	125	343	244
348	60	..	..	..	..	..	..
5)1,07,586	(5)5,265	18,432	*51,145	..	(7)7,041	..	†10,880
6,357	1,050	} 336	595	..	} 414	..	} 4,244
	348		..	..		..	
3,934	239	..	..	..	..	..	2,597
	4,452	526	1,172	..	..	..	..
Nil	..	..	..	..	..	..	..
786	80	..	..	..	..	..	..
	..	..	..	..	..	..	..
5,716	98	..	..	..	..	..	7
5,020	2,008	..	..	..	..	..	..
15,621	1,200	..	..	..	..	..	..
3,391	2,756	..	..	..	..	..	..
	..	..	..	..	..	..	..
7,903	2,460	46	4,067	711	442	903	4,601
Nil	..	..	1,949	..	210	426	..
Nil	..	..	..	..	..	1,596	..
	..	..	..	..	..	..	..
Nil	..	1,646	210	..	1,559	..	619
735	1,433	615	315	..	9	200	133
5,495	1,311	9,134	6,153	..	3,380	..	600
Nil	..	..	..	..	..	393	33
..	..	..	373	..	..	398	2,642
757	1,623	2,439	720	414	3	722	645
	..	..	..	..	..	..	..
Nil	5,223	..	..	..	..	..	..
2,17,925	52,108	41,954	82,104	6,410	15,554	11,558	47,062
1,26,729	43,152	32,996	23,014	7,945	2,924	23,012	10,966
3,44,654	95,260	74,950	1,05,118	14,355	18,478	34,570	58,023

\* Electrical charges Rs. 11,403 included.

(5) Rupees 6,514 less on consumption.

(6) Rs. 884 less on consumption.

(7) Rs. 333 less on consumption.

† Kerosine oil for workshops included, Rs. 618.

Includes Rs. 1,685 in excess of consumption.



## APPENDIX No. III.

*Statement showing initial capital cost, subsequent extensions, improvements, and expenditure chargeable to Capital on the water-works in the United Provinces for the year ending 31st March, 1924.*

Water-works stations.					Initial capital cost.	Cost of subsequent extensions, etc.	Expenditure during the year 1923-24.	Total
					Rs.	Rs.	Rs.	Rs.
Agra	..	..	..	..	11,70,761	19,50,822	27,075	31,48,658
Allahabad	..	..	..	..	16,24,061	11,04,271	39,011	27,67,343
Benares	..	..	..	..	25,61,881	*9,72,523	19,485	35,53,889
Cawnpore	..	..	..	..	14,44,570	12,17,049	26,452	26,88,071
Lucknow	..	..	..	..	15,15,736	31,76,164	6,66,332	53,58,232
Meerut	..	..	..	..	7,51,710	58,890	761	8,11,361
Mussoorie	..	..	..	..	†	†	†	†
Naini Tal	..	..	..	..	2,47,000	4,22,843	742	6,70,585
Dehra Dun	..	..	..	..	97,241	*83,309	4,169	1,89,719
Jhansi	..	..	..	..	96,556	88,808	Nil	1,85,364
Mirzapur	..	..	..	..	†5,98,492	*49,313	13,788	6,61,593
Muttra	..	..	..	..	5,17,288	*29,043	8,133	5,54,464
Total					..	..	..	..

\* N.B.—Corrections intimated by the Chairman, Municipal Boards concerned.  
† Correct details not yet received from the Board.



## APPENDIX No. IV.

Statement showing filter area out of operation, rate of filtration, and results of water analysis of the water-works in the United Provinces during the year 1923-24.

Water-works.	Sand filter area out of operation per million gallons pumped sq. feet.	Filtration rate in gallons per sq. foot per day of sand filter.			Water from supply mains.						
					Chemical analysis.			Bacteriological analysis.			
		Maximum.	Minimum.	Average.	Good.	Bad.	Total.	Number of samples tested.	Number of samples containing over 100 colonies.	Average number of microbes per c. c.	Percentage (on total) of samples over 100 per c. c.
agra ..	3,739	34·00	22·00	31·26	9	4	13	106	1	1·75	·94
lahabad ..	6,784	50·00	12·50	39·55	..	1	1	260	48	69·36	18·46
enares ..	4,400	50·00	18·75	41·64	105	..	105	389	4	43·30	1·03
awnpore ..	588*	60·00	10·00	42·32	34	..	34	401	Nil	11·97	Nil
ucknow ..	†3,560	40·60	4·60	21·19	3	..	3	53	2	19·28	3·77
		‡1973·00	‡218·00	‡992·50							
eerut ..	4,710	37·50	25·00	31·58	4	..	4	245	2	5·12	·82
ussoorie ..	}	Water supply from deep springs and is not filtered.			2	3	5	46	13	58·33	28·26
aini Tal ..					2	..	2	18	Nil	·33	Nil
ehra Dun ..					3	1	4	16	4	58·00	25·00
hansi ..	..	..	..	..	Information is not available.						
irzapur ..		Gravitation supply.			22	3	25	No colony count report was received.			
utta ..		Tube well supply.			..	6	6	27	3	33·00	11·11

\* Sand filters receive the effluent from Puech Chabal filters.

† Sand filters stopped on 9th November, 1923.

‡ For Paterson filters.



*Details of pumps, filters, tanks, reservoirs, rising mains,*

Particulars.	Agra.	Allahabad.	Benares.	Cawnpore.
1. Floor Levels :—				
Unfiltered Station R. L.	505·00'	296·00'	254·00'	408·00'
Filtered Station R. L. ..	505·00'	321·25'	263·00'	410·00'
2. Highest Water Level during the year R. L.	494'	261·75'	247·00'	
3. Lowest Water Level during the year R. L.	481·50'	239·75'	193·00'	
4. Particulars of plant ..				
Unfiltered station ..	2. Dissel sets ..	1 Triple Expansion Rotary.	1. H. D. Worthington.	1. Triple Expansion Rotary.
	2. L. D. Worthington.		2. Geared sets ..	2. Triple Expansion.
	2. Geared sets ..	2 Beams ..		2. L. D. Worthington.
Filtered station ..	2. Beams	2 Beams ..	2. Pairs of coupled Beams ..	1. H. D. Worthington.
	2. Belliss and Morcom.			2. L. D. Worthington.
	1. H. D. Worthington.			
5. Capacity of pumps { G. P. M.				
Unfiltered Station {	Diesels 3,000 each ..	Triple 2,700 ..	H. D. 8,333 ..	Triple 3,625 ..
	L. D. W. 1,700 ..	Beams 2,100 ..	Geared 4,200 ..	L. D. W. 3,125 ..
	Geared 1,300 each ..	each ..		each
Filtered Station {	Beams 3,000 each ..	Beams 3,100 ..	Beams 7,500 ..	H. D. W. 4,711 ..
	Belliss 2,500 ..	each.	each set	L. D. W. 3,125 ..
	H. D. W. 2,300 ..		(2 engines).	each.
	..	..	..	..
6. Number of rising mains {	Two	Two	Two	Two
	Filtered pumps to	Unfiltered pumps to	Unfiltered pumps to	Unfiltered pumps to
	Service tanks ..	Settling tanks ..	Settling tanks ..	Settling tanks ..
7. Length and size of rising mains. {	2·5 miles..28"	1·9 miles each ..	Old ·89 mile ..	1·39 miles each ..
	1·75 miles..18"	20"	New ·77 mile ..	20"
			Each 24"	
8. Number of settling tanks	Five ..	Three ..	Three ..	Three ..
9. Size of settling tanks ..	266'×151'×13' deep	280'×180'	403·5'×252·5'×15'	343·5'×243·5'×13·5'
10. Capacity of settling tanks gallons.	2,200,000 each	1 & 3=4,400,620 2=4,455,626	1 & 3=6,436,120 2=6,508,927	5,923,664 each
11. Number of filters ..	Seven slow sand and one Mechl.	Six ..	Eight ..	Seven
12. Size of filters ..	Sand 200'×100' each	200'×100'	200'×100'	200'×100'

. V.

## the water-works of the United Provinces for 1923-24.

Lucknow.	Meerut.	Mussoorie.	Naini Tal.	Dehra Dun.	Jhansi.	Mirzapur.	Muttra.
367·50'	735·50'	Main 5494·56'	..	..	..	..	..
395·00'	735·50'	Aux. 6000·00'	..	..	751·05'	..	580·00'
383·00'	805·00'	..	..	..	768·70'	460·00'	..
342·60'	771·00'	..	..	..	762·45'	451·00'	..
Triple Ex- pansion Rotary.	2. Water power Turbines.	Main pump- ing station.	Lake station steam pumps.	..	2. Compound Worthing- ton pumps.	..	2. Mirrlees Bickerton Diesel en- gines and motor dri- ven Mather and Platt centrifugal pumps.
Triple Ex- pansion vertical L. D. Worth- ington.	1. Semi-port able en- gine.	2. Sets elec- trically dri- ven geared three ram- pumps sin- gle reduc- tion gear- ing.	Main sta- tion. 3. L. D. Wor- thington.	..	..	..	..
H. D. Worth- ington. L. D. Worth- ington.	2. Water power Turbines.	Aux. pumping station 2. Pumps as above but with double reduction gearing. 1. Semi-Diesel oil engine.	..	..	..	..	..
ple 3,125 .. D. W. 3,125	.. 1,200 each	.. .. ..	.. .. ..	.. .. ..	.. 209·5 each	.. ..	.. 1,400 each
D. 3,125 .. D. 3,125 .. each	.. 1,100 each	Main pumps .. 182 each Auxiliary pumps. 80 each	Lake 239 .. Main .. One pump 218. * Two 86 each.	.. .. .. .. .. ..	.. .. .. .. .. ..	.. .. .. .. .. ..	.. .. .. .. .. ..
One filtered pumps to stling tank..	One Filtered pumps to tanks.	Two Pumping sta- tion to ele- vated re- servoirs.	Five Pumping station to elevated reservoirs.	Three Gravita- tion supply.	Five Pumping station to service tanks.	One Gravita- tion Main.	One Pumping station to Balancing tanks.
5 miles .. ..	7·25 miles 15" 1·61 " 13"	1·13 miles 5" 0·26 " 3½"	·93 mile 4" ·66 " 3½" ·34 " 3" ·49 " 4" ·25 " 5"	— 3" — 2½" — 2"	3·65 miles 9" 0·70 mile †6" 1·6 miles 6" ·57 mile 4" ·95 " 3"	5·73 miles 12"	·91 mile 12"
ree .. 250'×200'× 13·5' 4,000,000 each	Three .. 100'×60½'× 11' 528,000 each	C. W. R., six 2—40'×25' ×8' 1—80'×20'× 8'	.. .. .. .. .. ..	.. .. .. .. .. ..	.. .. .. .. .. ..	.. .. .. .. .. ..	.. .. .. .. .. ..
ven .. aterson filters 5.	Four .. 150'×100'	1—80'×24' ×6" 1—79·3'×38' ×11'	One chlorine Plant ..	.. .. .. ..	.. .. .. ..	.. .. .. ..	.. .. .. ..

\* New pumps.

Two for each zone.

H. Z. average 125 g p. m. each.

I. Z. " 176 " "

L. Z. " 310 " "

† Partly replaced by 5"

‡ 360 square feet each.



*Details of pumps filters, tanks, reservoirs, rising mains, etc. in*

Particulars.	Agra.	Allahabad.	Benares.	Cawnpore.
13. No. of Clear Water Reservoirs.	Three ..	Two ..	Two ..	Two
14. Size of Clear Water Reservoirs.	103'×105'×10' each.	163'×103·3'×12' each.	178½'×148½'×12' each	135'×106½' each
15. Capacity of Clear Water Reservoirs gallons.	676,000 each	1,248,000 each	1,854,068 each	953,300
16. Number of Service Reservoirs.	Three ..	One ..	One ..	Two
Size of Service Reservoirs	1=66'×11½' deep 2=20'×50' deep	60'×11' ..	60'×15' ..	(1) 50·5' (1) 50·5'
Capacity, Galls. ..	*	..	..	..
17. Number of public stand posts.	One tap .. 196 Two taps .. 73 Four taps .. 68 W. N. Cocks .. 41 .. Bibcocks .. 14 Other type 7	One tap 160 Two taps 60 Four taps 82 W. N. cocks 39 Push cocks 6 Bibcocks 23 .. Swan neck 15	One tap 92 Two taps 54 Four taps 13 Wall Fountains } 23 .. .. W. N. Cocks 122	One tap 47 Two taps 52 Four taps 90 W. N. Cocks Wall fountain ..
18. Number of fire hydrants ..	145	172	87	148
19. Number of road watering posts or stand pipes.	46	127	130	16
20. Number of cattle troughs	44	29	8	21

\* One High zone 67'×13·5' circular.  
 Low zone (in 3 parts).  
 Central 60'×16'×8'  
 Two side 28'×16'×8' each.  
 H. Z. capacity = 2,90,000 gallons.  
 L. Z. " = 86,500 "

[illegible]



## APPENDIX No. VI.

*Detailed statement of the expenditure incurred on works of sanitary nature executed under the supervision of the Superintending Engineer, Public Health department, during the year 1923-24.*

Serial number.	Name of place.			Water-works original and special repairs.	Water-works maintenance.	Drainage works.	Other works.	Total.
				Rs.	Rs.	Rs.	Rs.	
1	Agra .. ..	..	..	27,075	1,61,643	74,205	3,999	2,06,922
2	Aligarh .. ..	..	..	..	..	..	3,607	3,607
3	Allahabad .. ..	..	..	1,26,654	2,09,320	..	..	3,35,974
4	Benares .. ..	..	..	19,485	2,33,851	..	..	2,53,336
5	Cawnpore .. ..	..	..	26,452	3,07,725	..	..	3,34,177
6	Dehra Dun .. ..	..	..	4,169	6,410	..	..	10,579
7	Farrukhabad .. ..	..	..	..	..	..	10,576	10,576
8	Firozabad .. ..	..	..	..	..	..	15,971	15,971
9	Fyzabad .. ..	..	..	2,41,199	..	..	..	2,41,199
10	Gola Gokarannath .. ..	..	..	47,465	..	..	..	47,465
11	Haldwani .. ..	..	..	1,873	..	..	..	1,873
12	Jhansi.. ..	..	..	..	15,554	..	..	15,554
13	Kosi .. ..	..	..	..	..	..	3,351	3,351
14	Lucknow .. ..	..	..	12,12,546	2,17,925	49,259	5,832	14,88,562
15	Meerut .. ..	..	..	761	52,108	..	..	52,869
16	Mirzapur .. ..	..	..	13,788	11,558	..	..	25,346
17	Moradabad .. ..	..	..	..	..	9,155	4,572	13,727
18	Mussoorie .. ..	..	..	1,06,010	41,954	..	..	1,47,964
19	Muttra .. ..	..	..	8,133	47,062	49,659	33,789	1,38,643
20	Naini Tal .. ..	..	..	10,221	82,104	..	..	92,325
21	Shahadara (Delhi) .. ..	..	..	..	..	..	7,834	7,834
Total .. ..				18,45,331	13,87,214	1,82,278	94,651	35,09,474

Number.	Name of water works.	Class of work gravitation or pumping.	Fuel consumed tons.	Fuel consumption per 1,000 foot gallons.	Price of fuel per ton.	Total (average) lift feet.	Percentage of charges for—					Per 1,000 gallons.		Per head of total population per annum.			Remarks.	
							Establishment.	Fuel.	Oil and waste.	Repairs to machinery.	Other charges.	Total working cost.	Total receipt.	Total working cost.	Total receipt.	Loss.		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
					Rs.							As.	As.	As.	As.	As.		
1	Agra ..	Pumping ..	(1) 2,938.00	01,948	26.60	190.91	23.35	50.15	5.01	.48	21.01	2.16	2.25	19.52	20.25	*.73	* Profit.	
2	Allahabad ..	Ditto ..	(2) 4,509.84	03,722	18.18	186.14	28.94	52.71†	3.34	2.98	12.03	2.73	3.78	24.86	34.37	9.51*	† Includes electrical charges.	
3	Benares ..	Ditto ..	(3) 6,630.22	03,579	13.70	184.74	26.88	52.71	2.92	4.05	13.44	3.73	1.98	41.63	22.06	19.57		
4	Cawnpore ..	Ditto ..	(4) 6,938.00	03,412	13.40	186.33	23.89	46.01	2.25	3.96	23.89	2.67	3.01	23.59	32.13	3.59*		
5	Lucknow ..	Ditto ..	(5) 5,830.10	03,108	19.57	174.97	24.84	49.37	2.91	2.52	20.36	5.31	4.32	22.92	18.62	4.30		
6	Meerut ..	Turbines worked by water power.	(6) 236.00	03,119	26.00	123.03	43.30	10.10	2.63	2.52	41.40	3.47	2.14	12.43	7.67	4.76		
7	Mussoorie ..	Pumping and gravitation.	..	..	..	Av. 1,466.22	20.92	43.93	.80	21.77	12.57	14.70	11.28	78.43	60.20	18.23		
8	Naini Tal ..	Ditto ..	*	*	*	Av. 736.13	13.76	62.29	.72	7.50	10.73	43.11	31.09	97.11	62.75	34.36		
9	Dehra Dun ..	Gravitation ..	..	..	..	..	82.45	..	..	..	17.55	3.48	.61	6.74	1.18	5.56		
10	Jhansi ..	Pumping ..	(7) 447.30	04,414	16.59	165.00	16.05	45.27	2.66	21.73	14.29	5.10	2.25	4.45	1.96	2.49		
11	Mirzapur ..	Gravitation ..	..	..	..	..	59.87	..	..	..	40.13	2.78	1.52	10.05	5.49	4.56		
12	Muttra ..	Pumping ..	(8) 67.70	00,311	126.70	137.00	43.05	23.12	9.02	1.27	23.54	2.75	2.06	15.69	13.13	2.51		

Footnotes—

(1) Coal and fuel oil combined. Oil fuel 103.6 tons. Coal consumption includes 158 tons shortage on rails.

(2) Coal and fuel oil combined. Oil fuel 13.62 tons for Daraganj pumping. Electrical units for Mayo Hall converted to oil fuel. (15.77 tons) Coal consumption includes 87.6 tons for municipal purposes.

(3) Includes 99.25 tons of coal for municipal purposes.

(4) Includes 378 tons of coal for municipal purposes. Electrical charges Rs. 13,839 converted into coal (754.8 tons).

(5) Includes 878.35 tons shortage, and 8.5 tons used for municipal purposes.

(6) Consumption for pumping 23,865,306 gallons only (steam power during canal closure). Includes 27.75 tons for municipal purposes.

(7) Includes 2.9 tons of coal for municipal purposes.

(8) Fuel oil consumption includes 3.2 tons shortage during transit.

\* Reliable figures cannot be given owing to change over from steam to electrical power.



# APPENDIX No. VIII.

Statement showing initial capital cost, details of income and expenditure for water-works in the United Provinces  
for the year 1923-24.

Serial num.	Particulars.	Agra.	Allaha- bad.	Benares.	Cawn- pore.	Luck- now.	Meerut.	Mussoo- rie.	Naini Tal.	Dehra Dun.	Jhansi.	Mirzapur.	Muttra.
1	Description of plant ..	Oil engine and steam power.	Steam power, oil and electri- city.	Steam power.	Steam power and electri- city.	Steam power.	Water and steam power.	Hydro- electric and oil power.	Steam power, electri- city and gravity.	Gravita- tion.	Steam power.	Gravita- tion.	Oil engine.
2	Initial capital cost in lakhs ..	Rs. 11.71	16.24	25.62	14.45	15.16	7.52	..	2.47	.97	.97	5.98	5.17
3	Total cost of works in lakhs ..	31.49	27.67	35.53	26.83	53.58	8.11	..	6.70	1.90	1.85	6.61	5.54
4	Number of inhabitants drawing their supply from mains.	185,946	157,220	198,447	216,426	201,334	122,609	15,289	17,319	34,092	25,000	38,400	42,613
5	Hours of supply daily ..	10.00	11.60	7.90	16.16	16.50	14.00	20.00	12.63	24.00	10.00	24.00	10.12
6	Quantity supplied during year in million gallons.	1,674.30	1,429.42	2,212.28	2,311.02	1,035.93	439.58	(1)81.56	(1)34.96	65.91	57.91	198.74	337.13
7	Maximum daily average during any one month in thousand gallons.	4,830	4,566	6,720	7,630	3,526	1,602	284	269	180	199	625	1,367
8	Average daily supply for the year in thousand gallons.	4,575	3,905	6,044	6,314	2,830	1,201	223	95	180	158	543	921
9	Maximum supply per head per day.	25.97	29.04	33.86	35.25	17.51	13.06	18.58	15.54	5.28	7.94	16.27	32.07
10	Average supply per head per day ..	24.61	24.84	30.46	29.17	14.06	9.80	14.57	5.51	5.28	6.33	14.13	21.60
11	Total lift (average) ..	190.91	186.14	184.74	186.33	174.97	123.08	1,466.22	736.13	Gravity supply. ..	165.00	Gravity supply. ..	137
12	Quantity supplied during year in million foot gallons.	319,641	266.072	408,696	430,612	181,265	54,104	119,582	25,734	..	9,555	..	46,187
13	Fuel consumed ..	(a) 2,938	(b) 4,509.84	6,620.22	(c) 6,938.00	5,830.10	236.00	..	*	..	(d) 447.30	..	(e) 67.70
14	Fuel consumption per million foot gallon.	19.48	37.22	35.79	34.12	61.08	131.19	..	*	..	104.14	..	3.11
15	Cost of fuel per ton ..	..	..	..	..	..	..	..	..	..	..	..	..





APPENDIX No. IX.  
HYDRO-ELECTRIC SUPPLY.  
1923-24.

Particulars.					Mussoorie.	Naini Tal.
1.	Total Units generated B. T. U.	..	..	..	3,500,000	488,361
2.	Maximum units for any one day B. T. U.	..	..	..	12,500	1,996
3.	Average load K. W.	..	..	..	368	82.2
4.	<i>Power Factor—</i>					
	Maximum..	..	..	..	.95	.96
	Minimum	..	..	..	.70	.39
5.	<i>Load Factor—</i>					
	Maximum (monthly)	..	..	..	.50	‡
	Average .. ..	..	..	..	.40	.38
	Minimum (monthly)	..	..	..	.30	‡
6.	<i>Generating Volts—</i>					
	Maximum..	..	..	..	6,800	3,500
	Minimum	..	..	..	6,600	3,400
7.	Total Hours of running	..	..	..	8,784	8,755
8.	Total cubic feet of water used	..	..	..	210,000,000	24,452,700
9.	Maximum quantity used in any month, cubic feet	..	..	..	20,400,000	2,335,200
10.	Minimum quantity used in any month, cubic feet	..	..	..	15,600,000	1,618,720
11.	Average rate of discharge cubic feet per diem	..	..	..	573,770	66,810
12.	<i>Maximum rate of discharge of pipe line—</i>					
	No. 1 cubic feet per diem	..	..	..	} * 750,000	93,440
	No. 2 " " " "	..	..	..		90,560
13.	<i>Minimum rate of discharge of pipe line—</i>					
	No. 1 cubic feet per diem	..	..	..	} *445,000	1,000
	No. 2 " " " "	..	..	..		12,000
14.	Average intake level	..	..	..	} Constant Head.	12.58
15.	Maximum intake level	..	..	..		18.70
16.	Minimum intake level	..	..	..	996'	3.40
17.	Total rainfall for the year inches	..	..	..	83.25	95.68
18.	Total cubic feet overflow in lake weir (million cubic feet) (Naini Tal only).	..	..	..	..	50.55
19.	Maximum recorded rainfall for 24 hours (inches)	..	..	..	10.0"†	6.85

\* Both pipes used together.

† At Power House.

‡ Figures not supplied. Meter out of order.

## APPENDIX No. X.

## HYDRO-ELECTRIC SUPPLY.

Statement showing current consumed, rate charged and revenue derived.

1923-24.

	Mussoorie.			Naini Tal.		
	B. T. Units.	Rate.	Rs.	B. T. Units.	Rate.	Rs.
1. For Municipal purposes.	..	..	..			
Public Lighting ..	155,113	Not charged for.	10,576	127,855	Rs. 2. per lamp 2 annas	18,000
W. S. Pumping ..	*159,663		18,432	60,817		11,402
Other purposes ..	500,000	Not charged for.	..			
2. Sold by meter	..	..	..			
Lighting ..	512,480	at 6 annas and 3 annas per unit.	1,35,930	92,303	6 annas	34,614
Heating ..	3,44,574	One anna nine pies and six pies.	15,294	14,043	3 to 1½ annas.	2,633
Power ..						
3. Recoveries on rated premises.	61,572	..	15,393	55,388	Rs. 2 a lamp.	6,466
4. Other receipts ..	..	..	..	789	8 annas	394
5. Meter rent and miscellaneous.	..	..	12,209	..	..	2,812
6. Total units sold and receipts.	†1,648,329	..	2,07,934	351,195	..	76,322

\* For Dehra Dun.

† Does not include 155,113 units for municipal purposes and 500,000 units for other purposes.

## APPENDIX No. XI.

Statement showing number of connections.

1923-24.

	Mussoorie.		Naini Tal.	
	Number.	K. W.	Number.	K. W.
1. Private connections at close of preceding year	(a) 2,795		313	
2. Connections made during the year ..	(b) 402		252	
3. Metered connections existing on the 21st March, 1924.	(c) 1,847		296	
4. Municipallamps existing on the 31st March, 1924.	(d) 1,450		466	
5. Heating points connected on the 31st March, 1924.	(e) 325		39	
6. Total K. W. connected on the 31st March, 1924.	..	4,000		773.4
7. Peak load for the year ..	..	650		190.0
8. Diversity factor per cent.	..	45.00		24.57

(a) Includes 1,364 connections for Dehra Dun.

(b) " 211 " " "

(c) " 875 " " "

(d) " 723 " " "

(e) " 88 " " "



APPENDIX No. XII.  
HYDRO-ELECTRIC SUPPLY.  
*Annual Maintenance Account.*  
1923-24.

Particulars of charges.					Mussoorie.	Naini Tal.
					Rs.	Rs.
I.— <i>Staff charges</i> —						
(a) Direction	..	..	..	..	24,880	} 29,395
(b) Office establishment	..	..	..	..	12,443	
(c) Power station staff	..	..	..	..	8,301	
(d) Sub-station staff	..	..	..	..	4,093	
(e) Pipe line staff	..	..	..	..	373	
(f) Overhead line staff	..	..	..	..	6,609	} 3,179
(g) Contingencies	..	..	..	..	3,043	
II.— <i>Materials</i> —						
(a) Oils	..	..	..	..	} 14,092	} 5,888
(b) Lubricants	..	..	..	..		
(c) Waste	..	..	..	..		
(d) Buildings	..	..	..	..		831*
III.— <i>Repairs</i> —						
(a) Machinery	..	..	..	..	1,234	487
(b) Pipe line	..	..	..	..	861	2,179
(c) Overhead line	..	..	..	..	..	13,075
(d) Buildings	..	..	..	..	766	..
IV.—Rents	..	..	..	..	1,500	} Included under head I(g).
V.—Printing	..	..	..	..	1,355	
VI.—Stationery	..	..	..	..	400	
VII.—Insurance	..	..	..	..	30	
VIII.—Total maintenance charges	..	..	..	..	79,980	55,034
IX.—Interest and sinking fund charges	..	..	..	..	90,609	70,766
X.—Total annual charges	..	..	..	..	1,70,589	1,25,800
XI.—Total units generated	..	..	..	..	35,00,000	4,88,361
XII.—Total units sold	..	..	..	..	16,48,329	3,51,195
XIII.—Cost per unit generated, Annas	..	..	..	..	·78	4·12
XIV.—Cost per unit sold, Annas	..	..	..	..	2·01	3·47

\* Includes Rs. 195 for intake and other items.

## APPENDIX No. XIII.

*A.—List of projects finally sanctioned during the year 1923-24.*

				Amount of estimate. Rs.
Allahabad : Adh Kumbh Mela Water-supply, 1924	..	..	..	75,800
Allahabad : Trial boring at Mansaita nala bridge	..	..	..	2,474
Delhi : Shahadara Tube well (Supplementary estimate)	..	..	..	2,492
Fyzabad : Water-supply	..	..	..	9,93,890
Do. Ditto estimate of shop round raised reservoir tower	..	..	..	15,359
Gola Gokaran Nath : Tank improvement and water-supply	..	..	..	1,59,871
Ditto Ditto ditto (First supplementary estimate).	..	..	..	6,686
Haldwani : Water-supply improvement maintenance	..	..	..	2,445
Hardwar : Electric supply. (Preliminary proposal)	..	..	..	2,12,112
Do. Sewerage. (Preliminary proposals)	..	..	..	8,61,742
Kosi : Tube well (Supplementary estimate)	..	..	..	3,572
Lucknow : 27" Delivery main	..	..	..	29,085
Muttra : Flushing tank at the head of main intercepting sewer	..	..	..	2,293
Do. Infectious Diseases Hospital	..	..	..	53,349
Do. Sewage disposal scheme	..	..	..	1,83,301
Total	..	..	..	26,04,471

*B.—List of projects submitted but not sanctioned during 1923-24.*

				Amount of estimate. Rs.
Agra : Circuit house drainage extension (preliminary proposals)	..	..	..	1,371
Agra : Circuit house drainage extension (alternative proposals)	..	..	..	8,160
Agra : New kotwali water-supply	..	..	..	28,448
Agra : New kotwali proposed water-flushed fittings and drainage	..	..	..	59,343
Agra : New kotwali proposed fittings and drainage for conservancy system	..	..	..	24,338
Allahabad : Adh Kumbh mela water-supply estimate for extra works-required for water-supply to Akaharas	..	..	..	3,080
Allahabad : Trial bore for Karelabagh	..	..	..	6,931
Dehra Dun : Baldi Spring water-supply. Part I	..	..	..	1,48,910
Dehra Dun : ditto ditto Part II	..	..	..	88,298
Fyzabad : Estimate of cost of maintenance of water-supply	..	..	..	39,547
Fyzabad : Estimate for extension to distribution system. (Supplementary estimate)	..	..	..	48,521
Gola Gokaran Nath ; Tank Improvement and water-supply (Second-supplementary estimate)	..	..	..	8,675
Gorakhpur : Trial tube wells for villages	..	..	..	17,844
Gorakhpur : Tube well at Nauthanwan village	..	..	..	5,993
Haldwani : Water-supply improvement maintenance estimate for the year 1924-25	..	..	..	2,983
Haldwani : Water-supply improvement to filtration plant	..	..	..	26,693
Hathras : Water-supply	..	..	..	6,62,222
Jaunpur : Tube well in the compound of new Civil Hospital	..	..	..	4,870
Kaimganj : Drainage	..	..	..	1,32,640
Lucknow : Additions to Gaughat Pumping station	..	..	..	12,926



	Amount of estimate.
	Rs.
Lucknow : Inlet channel to settling tank water-works re-organisation ..	22,035
Muktesar : Water supply .. .. .	94,688
Naini Tal : Hydro-electric Scheme-Estimate of six-seated latrine ..	2,005
Saharanpur : Tube-well at police station Biharigarh ..	2,300
Total ..	14,52,821

*C.—List of schemes under preparation with the approximate  
estimated amounts.*

	Approximate amounts.
	Rs.
Agra : Estimate of two additional sand filters at water-works ..	1,29,000
Allahabad : Water-supply re-organisation scheme ..	32,00,000
Cawnpore : Drainage. Part VI ..	1,50,000
Cawnpore : Jail and Police line drainage ..	12,131
Farrukhabad : Estimate for water-supply and re-organisation of Drainage scheme (Preliminary estimate) ..	5,50,000
Hardwar : Electric supply ..	2,12,112
Kanauj : Drainage. (Complete scheme) ..	2,93,609
„ (One section only) ..	17,000
Lucknow : Experimental wood stave pipe ..	19,091
Muttra : Estimate for constructing tube wells on the Banjatra route ..	25,000
Muttra : Type design for a 20-seated latrine ..	5,437
Muttra : Three-seated water flushed latrine on Kanskhar mela ..	2,000
Tilhar : Improvement of nalas ..	20,000
Total ..	46,35,430

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**APPENDICES to the Report of the Director of  
Public Health, United Provinces.**

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## APPENDIX A.

*Statement showing death-rates of the localities where a drainage system or water-supply has been introduced.*

District.	Locality.	Date of completion of works of—		Average annual death-rate since the introduction of drainage system or water-supply or both.	Average annual death-rate for the five years period preceding the introduction of drainage system or water-supply or both.	Remarks.
		Drainage.	Water-supply.			
Bijnor	Dhampur town ..	1915	..	(a)46·24	41·47	{ (a) For eight years.
	Total for the district, excluding Dhampur town ..	..	..	(a)50·52	41·76	
Meerut	Hapur town ..	1913	..	(b)40·32	33·54	(b) For ten years.
	Meerut town ..	1918	..	(c)29·88	36·30	(c) For five years.
Almora	Almora town ..	1913	..	(d)31·84	22·95	{ (d) For ten years.
	Total for the district, excluding Almora town ..	..	..	(d)34·24	27·16	
Bulandshahr	Khurja town ..	1914	..	(d)53·71	51·43	{ Ditto.
	Total for the district, excluding Khurja town ..	..	..	(d)38·25	40·76	
Pilibhit	Pilibhit town ..	1915	..	(e)60·20	47·51	{ (e) For nine years.
	Total for the district, excluding Pilibhit town ..	..	..	(e)51·53	37·73	
Bahraich	Bahraich town ..	1916	..	(f)26·97	29·60	{ (f) For seven years.
	Total for the district, excluding Bahraich town ..	..	..	(f)41·45	31·35	
Muttra	Muttra town ..	1917	1917	(f)57·25	37·97	{ Ditto.
	Total for the district, excluding Muttra town ..	..	..	(f)39·43	26·57	
Mirzapur	Mirzapur-Bindhachal town ..	..	1914	(g)35·80	35·23	{ (g) For nine years.
	Total for the district, excluding Mirzapur-Bindhachal town..	..	..	(g)36·75	30·52	
Naini Tal	Naini Tal town ..	1918	..	(h)22·75	15·40	{ (h) For six years.
	Total for the district, excluding Naini Tal town ..	..	..	(h)45·09	40·94	

NOTE.—In this table it is only possible to give statistics for a district excluding areas affected in cases where the projects were all completed on practically the same date.

## APPENDIX B.

*Annual report of the Board of Public Health, United Provinces, for the year ending the 31st December, 1923.*

During the year under report rules for the constitution and functions of the Board were revised and submitted to Government for approval. The rules as finally sanctioned were published in the *United Provinces Government Gazette* of the 26th May, 1923, with notification no. 176/XVI—51-22, dated the 23rd May, 1923.

The Board now consists of fifteen members—six officials and nine non-officials—appointed by Government for a term of two years. Of the nine non-officials, one will ordinarily be a chairman of a district board.

Mr. R. Burn, C.S.I. (I.C.S.), Member of the Board of Revenue, held the office of the President and I that of the Secretary (in addition to my duties as Head Assistant to the Director of Public Health) throughout the year.

Eight meetings were held by the Board during the year—five at Lucknow, two at Naini Tal, and one at Allahabad.

The total amount at the disposal of the Board for expenditure on sanitary works during the year amounted to Rs. 8,67,773 and was made up as under :—

	Rs.
I.—(a) Unexpended balance on 31st December, 1922	1,23,223
(b) Refunded by the Superintending Engineer, Public Health department, on account of the unspent portion of the grant for installing experimental wood stave pipes in the Lucknow municipality	13,750
(c) Refunded by the Commissioner, Lucknow division, out of the grant for sanitary works in notified and town areas	800
Total	1,37,773
II.—Allotment sanctioned in budget for 1923-24	7,30,000
	Rs.
(a) Recurring grant for special assistance to pilgrim centres	1,00,000
(b) Grants for urban sanitation	70,000
(c) Board's reserve	1,00,000
(d) Recurring grant for rural sanitation and minor sanitary works	1,00,000
(e) For other provincial works not charged to revenue	3,60,000
GRAND TOTAL	8,67,773

The allotments sanctioned by the Board during the year under report were—

A.—Out of unexpended balance and refunds of Rs. 1,37,773.

(i) *Water-Supply.*

	Rs.
Gola Gokaran Nath (district Kheri). For tank improvement and water-supply scheme	12,883
Benares. To meet excess in estimate for air compressor at Bhelupur water-works	4,864
Total	17,747



## (ii) Drainage and sewerage works.

	Rs.
<i>Rikhhikesh notified area.</i> For improvement of drains ...	13,266
Total ...	13,266

## (iii) General.

	Rs.
<i>Muttra.</i> —Infectious diseases hospital ...	52,479
<i>Soron.</i> —Improvement of Harki-pairi tank ...	7,800
<i>Nagina.</i> —For filling up of a tank in connection with anti-malarial works at—... ..	1,000
To Superintending Engineer, Public Health Department, for construction of one acqua privy ...	200
To Superintending Engineer, Public Health Department, on account of an additional grant for printing charges of type design for water-flushed latrines ...	85
<i>Sikandrabad.</i> —For meat market ...	3,940
<i>Gorakhpur and Deoria.</i> —Towards the cost of District Health Scheme ...	8,000
To Superintending Engineer, Public Health Department, for printing charges of type designs of dried meat factory ...	550
<i>Ballia.</i> —For re-roofing rat-proof godowns ...	25,556
<i>Lucknow.</i> —Anti-Tuberculosis League ...	550
<i>Dehra Dun.</i> —For Leper Asylum ...	600
<i>Merrut.</i> —For construction of five sump wells and other alterations in connection with anti-malarial measures ...	6,000
Total ...	1,06,760
GRAND TOTAL ...	1,37,773

B.—Out of the amounts provided in budget for 1923-24, viz., Rs. 7,30,000.

## (1) Special assistance to pilgrim centres.

(For general purposes).

	Rs.
<i>Kheri.</i> —For Gola Gokaran Nath tank improvement ...	139
<i>Cawnpore.</i> —For improvement of water-supply at Makanpur fair ...	1,000
<i>Garhwal.</i> —To Sadabart Fund for payment of allowances to the officers of the Provincial Subordinate Medical Service attached to Okhimath, Joshimath, and Chamoli dispensaries ...	1,050
Total ...	2,189

## (2) Rural sanitation and minor sanitary works.

	Rs.
To Commissioners of divisions (except Kumaun) for petty sanitary works in notified and town areas ...	45,000
For rural sanitation. (Covering wells with masonry, and putting in force or suction pumps in Saharanpur, Budaun and Farrukhabad districts) ...	23,397
To all Commissioners of divisions for sanitary improvements through village <i>panchayats</i> ...	31,603
Total ...	1,00,000

## (3) Urban sanitation.

	Rs.
<i>Naini Tal.</i> —Hydro-electric scheme ...	30,000
Do. For general sanitary purposes ...	5,000
Total ...	35,000

(4) *Out of reserve.*(i) *Water-supply.*

	Rs.
<i>Kosi notified area</i> (district Muttra). Further grant for boring up further to a depth of 250 feet below ground in connection with the tube well... ..	3,500
<i>Allahabad</i> .—To meet the excess expenditure incurred on the Allahabad unfiltered water-supply ... ..	12,575
<i>Benares</i> .—To clear off the liability for the tube well scheme ... ..	7,620
Total ... ..	23,695

(ii) *General.*

	Rs.
To municipal board, Lucknow, for installing experimental wood stave pipes in the Lucknow municipality ... ..	13,748
To Superintending Engineer, Public Health Departments for printing charges of circulars and specifications for pumps in rural areas ... ..	130
<i>Bijnor</i> .—For constructing four incinerators ... ..	2,000
<i>Allahabad</i> —Emergency outlet of the Jumna pumping station ... ..	12,500
Total ... ..	28,378
Total of (i) and (ii) ... ..	52,073

(5) *Out of provincial works not charged to revenue.*

	Rs.
<i>Lucknow</i> .—Re-organisation of water-supply ... ..	2,10,000
<i>Fyzabad</i> —Water-supply scheme ... ..	1,50,000
Total ... ..	3,60,000
GRAND TOTAL ... ..	5,49,262
Unexpended balance of allotments on 31st December, 1923 ... ..	1,80,738
Total ... ..	7,30,000

In addition to the allotments mentioned above, the undermentioned grants and loans were sanctioned by Government during the year under report :—

*Grants.*

	Rs.
<i>Lucknow</i> .—Towards the cost of the scheme for re-organisation of water-supply ... ..	3,00,000
<i>Lucknow</i> .—Excess in the cost of the sewage pumping and sullage farm scheme ... ..	2,05,000
<i>Lucknow</i> .—Towards the supervision charges of the sewage farm and pumping station ... ..	46,739
<i>Sadabart Fund</i> .—On account of percentage charges payable by it to the Public Works department for establishment, tools, and plant, in connection with the special monsoon repairs to the Bhatrojkhan-Bhikiasen cart road in the Almora district ... ..	3,670
Total ... ..	5,55,409

*Loans.*

	Rs.
<i>Lucknow</i> .—For the purchase of a motor lorry for carting coal for water-works ... ..	10,700
<i>Lucknow</i> .—For the water-works re-organisation scheme ... ..	1,00,000
Do. ditto ... ..	1,43,800
<i>Fyzabad</i> .—For completion of water-supply ... ..	1,34,000*
Total ... ..	3,88,500

\* (To be paid in three instalments.)



Of the schemes discussed by the Board during the year, projects for the works noted below, the estimated cost of which aggregated Rs. 38,49,010, were administratively approved:—

(a) *Water-works.*

	Rs.
<i>Hathras</i> —Water-works scheme .....	23,242
<i>Dehra Dun</i> .—Water-supply scheme .....	11,15,714
<i>Cawnpore</i> .—Water works. (Modified scheme) .....	12,14,000
<i>Gola Gokaran Nath</i> , (district <i>Kheri</i> ).—Improvement of water-supply scheme. (Revised estimate) .....	1,58,436
<i>Fyzabad</i> .—Water-supply scheme .....	9,93,890
Total .....	35,05,282

(b) *Drainage and sewerage works.*

<i>Rikhikesh</i> .—Improvement of drains .....	13,266
<i>Moradabad</i> .—For constructing a 50" circular sewer in connection with the drainage improvement .....	8,564
<i>Muttra</i> .—Sewage disposal scheme .....	1,94,000
Total .....	2,15,830

(c) *General.*

<i>Muttra</i> .—Infectious diseases hospital .....	53,349
<i>Bareilly</i> .—Slaughter-house at Hajipur .....	74,549
Total .....	1,27,898
GRAND TOTAL .....	38,49,010

The Superintending Engineer, Public Health Department, United Provinces, submitted copies of inspection reports by the Mechanical Engineer to Government on various water-works. These were duly considered by the Board and the existing defects brought to the notice of the local bodies and the divisional commissioners, concerned. The attention of Government was invited to the unsatisfactory condition of machinery and surrounding of water-works in Cawnpore and to the loss on water-supply incurred in Lucknow, Cawnpore, and Agra. The question of the utilization of the grants aggregating Rs. 1,08,000 made to the municipal board, Agra, for installing mechanical filters some years ago (which have remained unspent) was referred to Government, and eventually the municipal board of Agra accepted the advice of the Board of Public Health, as to the drawing up alternative plans, specifications and estimates with a view to find out the most suitable type of filters. The report of the Mechanical Engineer to Government on the maintenance of water-works, in which a number of valuable suggestions on the subject were made, was laid up before the board. The matters which are already within the powers of the municipal boards were brought to their notice through the divisional commissioners, while the recommendations which required alteration in the rules framed by Government were referred to Government. The proposal made by the Mechanical Engineer for water-works, United Provinces, that periodical tests of lightning conductors, earth-plates or connections of the water-works be made compulsory on all municipal boards having water-works in these provinces, was recommended to Government. The unsatisfactory state of sewers at Allahabad was also brought to the notice of Government.



Tabulated results of the analysis of water at municipal water-works in the provinces for 1922-23, forwarded by the Director of Public Health, were considered by the Board and the Director was asked for a note on the results of analysis of municipal water-supplies at Allahabad, Benares, Mussoorie, and Muttra.

The revised draft rules governing the preparation of plans and estimates for works, the execution of works, and conditions of sanction, forwarded by Government were accepted by the Board subject to certain changes. The Board were of opinion that rules should be made by Government indicating the qualifications which should be considered as a minimum for appointment to the post of Engineers.

The Board of Public Health are fully aware of the importance of improving sanitation in rural areas, but the problem is a difficult one. Hitherto grants have been made to district boards and to the authorities of small towns and have chiefly been expended in experiments for improving water-supply or filling up insanitary pits. If more ambitious schemes, such as drainage cuts are undertaken, funds are required for their upkeep and the Board of Public Health are aware that the finances of district boards will not be able to find money for this purpose. During the last two years the Board of Public Health have, as shown above, also made allotments to Commissioners which are distributed to village *panchayats* usually on condition that the *panchayats* spend an equal amount. The Board of Public Health desire, however, to pursue further enquiries into the best method of improving conditions in rural areas and propose to appoint a small sub-committee to make suggestions on their behalf.

As the district boards to whom considerable grants have been made from time to time for experiments in installing hand pumps in wells to prevent pollution in rural areas had difficulties in selecting a suitable pattern of pumps and getting contractors, the Superintending Engineer, Public Health Department, prepared a draft of conditions of contract, specifications, and drawings to suit the various types of wells. These were approved by the Board and ordered to be printed and circulated to district boards, etc.

The annual reports of the Director of Public Health, United Provinces, for the year ending the 31st December, 1922, and of the Superintending Engineer, Public Health Department, United Provinces, for the year ending the 31st March, 1923, were read and recorded. The Board of Public Health considered the results of the working of the District Health Scheme introduced in the districts of the Gorakhpur division, and recommended to Government that the scheme should be extended to other districts as funds permit. A recommendation was also made to the Commissioner, Gorakhpur division, that the Village Sanitation Act should be extended at once to more villages in the three districts of the division, as better results were expected there than elsewhere in view of the success of the District Health Scheme.

MOHI-UD-DIN,

*Secretary, Board of Public Health,*

*United Provinces.*

LUCKNOW :

*The 31st January, 1924.*



## APPENDIX C.

Statement showing grants made by the Board of Public Health, United Provinces, for the improvement of rural sanitation in 1923.

Number.	Division.	District.	Grants made in 1923.	Balance in hand on 31st De- cember, 1922.	Total.	Expenditure in 1923.	Balance in hand on 31st De- cember, 1923.	Number.
			Rs.	Rs.	Rs.	Rs.	Rs.	
1	Meerut.	Dehra Dun ..	..	..	..	..	..	1
2		Saharanpur ..	7,700	..	7,700	..	7,700	2
3		Muzaffarnagar ..	..	..	..	..	..	3
4		Meerut ..	..	238	238	109	129	4
5		Bulandshahr ..	..	1,203	1,203	783	420	5
6	Agra.	Aligarh ..	..	..	..	..	..	6
7		Muttra ..	..	25,821	25,821	570	25,251	7
8		Agra ..	..	..	..	..	..	8
9		Mainpuri ..	..	..	..	..	..	9
10		Etah ..	..	..	753	753	(b)753	10
11	Rohilkhand.	Bareilly ..	..	5,000	5,000	..	5,000	11
12		Bijnor ..	..	1,300	1,300	..	1,300	12
13		Budaun ..	8,562	..	8,562	..	8,562	13
14		Moradabad ..	..	..	..	..	..	14
15		Shahjahanpur ..	..	..	..	..	..	15
16	Allahabad.	Pilibhit ..	..	7,670	7,670	712	6,958	16
17		Farrukhabad ..	7,135	57	7,192	(c)23	7,169	17
18		Katwah ..	..	..	..	..	..	18
19		Cawnpore ..	..	..	..	..	..	19
20		Fatehpur ..	..	..	..	..	..	20
21	Jhansi.	Allahabad ..	..	..	..	..	..	21
22		Jhansi ..	..	1,000	1,000	413	587	22
23		Jalaun ..	..	4,500	4,500	500	4,000	23
24		Hamirpur ..	..	..	..	..	..	24
25		Banda ..	..	..	..	..	..	25
26	Benares.	Benares ..	..	872	872	835	37	26
27		Mirzapur ..	..	116	116	16	100	27
28		Jaunpur ..	..	1,000	1,000	915	85	28
29		Ghazipur ..	..	..	..	..	..	29
30		Ballia ..	..	575	575	525	50	30
31	Gorakhpur.	Gorakhpur ..	..	4,525	4,525	..	4,525	31
32		Basti ..	..	1,800	1,800	671	1,129	32
33		Azamgarh ..	..	1,354	1,354	1,023	331	33
34		Naini Tal ..	..	506	506	..	506	34
35		Almora ..	..	..	..	..	..	35
36	Lucknow.	Garhwal ..	..	1,052	1,052	127	925	36
37		Lucknow ..	..	30	30	(d)30	..	37
38		Unao ..	..	353	353	353	..	38
39		Rae Bareilly ..	..	542	542	20	522	39
40		Sitapur ..	..	..	..	..	..	40
41	Fyzabad.	Hardoi ..	..	313	313	218	95	41
42		Kheri ..	..	(a)1,518	1,518	874	644	42
43		Fyzabad ..	..	1,996	1,996	1,548	448	43
44		Gonda ..	..	7,500	7,500	800	6,700	44
45		Bahraich ..	..	..	..	..	..	45
46	Fyzabad.	Sultanpur ..	..	2,859	2,859	2,433	426	46
47		Partabgarh ..	..	2,888	2,888	1,018	1,870	47
48		Bara Banki ..	..	..	..	..	..	48
Total ..			23,397	77,341	100,738	15,269	85,469	

(a) Includes Rs. 325 the unspent amount refunded by the tahsildar of Lakhimpur during the quarter ending 31st March, 1923.

(b) The Board spent Rs. 169-13-3 from its own funds in addition to this.

(c) Ditto Rs. 26-4 0 ditto.

(d) Ditto Rs. 29-12-6 ditto.

## APPENDIX D.

*Statement showing the striking protective results of anti-plague inoculations.*

Name of village or town.	Popula- tion.	Number inoculated.	Number uninocu- lated.	Deaths among inocu- lated.	Deaths among uninocu- lated.
MEERUT DISTRICT.					
Ghaziabad .. ..	11,304	597	10,707	..	413
CAWNPORE DISTRICT.					
Asalatganj .. ..	3,000	40	2,960	..	20
Bahadurpur .. ..	400	26	374	..	15
Rura .. ..	1,000	25	975	..	..
Radha .. ..	300	30	270	..	20
Chaubepur .. ..	1,000	40	960	..	40
Mandhana Bahlolpur .. ..	474	30	444	..	9
Ditto Birtiyana .. ..	217	15	202	..	2
Ditto Bagdodhi .. ..	323	66	257	1	17
Ditto Rarha .. ..	160	5	155	..	8
Ditto Purva .. ..	147	40	107	..	9
Ditto Gurha .. ..	135	30	105	..	5
Ditto Kothi .. ..	66	55	11	..	2
BULANDSHAHR DISTRICT.					
Jahangirabad .. ..	11,000	262	10,738	..	50
BANDA DISTRICT.					
Banda .. ..	20,029	758	19,271	1	379
JHANSI DISTRICT.					
Barwasagar .. ..	6,376	44	6,332	..	78
HAMIRPUR DISTRICT.					
Dhaurrah .. ..	1,153	153	1,000	2	16
FATEHPUR DISTRICT.					
Bindki .. ..	6,906	200	6,706	..	145
Jahanabad .. ..	4,297	20	4,277	..	32
Deomai .. ..	1,636	62	1,574	..	45
Kishenpur .. ..	2,203	26	2,177	..	112
Khaga .. ..	3,603	10	3,593	..	41
Tisai Khurd .. ..	696	5	691	..	19
BALLIA DISTRICT.					
Ballia .. ..	18,215	,1037	17,178	..	193
Rasra notified area .. ..	7,235	475	6,760	..	99
Bhelsand .. ..	848	251	597	..	25
Kasa under .. ..	753	259	494	..	34
Narahi .. ..	6,462	332	6,130	..	23
Aundi .. ..	1,789	311	1,478	..	19
Salempur .. ..	947	208	739	..	17





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# STATISTICAL STATEMENTS.

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Paragraphs 3, 5, 6, 7 and 8.]

ANNUAL

*Births registered in the districts of the*

1	2	3			4		
Number.	District.	Population according to census of 1921.			Number of births registered.		
		Male.	Female.	Total.	Male.	Female.	Total.
	MEERUT DIVISION.						
1	Dehra Dun ..	128,176	84,067	212,243	3,003	2,577	5,580
2	Saharanpur ..	515,908	421,563	937,471	22,021	19,562	41,583
3	Muzaffarnagar ..	434,307	359,958	794,265	17,530	14,880	32,410
4	Meerut ..	809,994	689,080	1,499,074	33,990	29,685	63,675
5	Bulandshahr ..	562,529	503,990	1,066,519	26,723	23,356	50,079
	AGRA DIVISION.						
6	Aligarh ..	575,379	486,366	1,061,745	24,237	21,525	45,762
7	Muttra ..	341,150	277,988	619,138	11,056	9,732	20,788
8	Agra ..	508,298	415,857	924,155	21,189	18,977	40,166
9	Mainpuri ..	411,981	336,046	748,027	12,096	10,519	22,615
10	Etah ..	449,162	380,598	829,760	13,555	12,165	25,720
	ROHILKHAND DIVISION.						
11	Bareilly ..	544,885	468,990	1,013,875	22,884	21,024	43,908
12	Bijnor ..	389,643	350,539	740,182	19,146	17,375	36,521
13	Budaun ..	527,823	447,524	975,347	20,652	18,416	39,068
14	Moradabad ..	639,022	559,631	1,198,653	29,852	27,221	57,073
15	Shahjahanpur ..	452,837	386,278	839,115	19,434	17,906	37,340
16	Pilibhit ..	229,130	202,471	431,601	10,619	9,785	20,404
	ALLAHABAD DIVISION.						
17	Farrukhabad ..	469,009	387,624	856,633	18,045	16,064	34,109
18	Etawah ..	404,323	329,209	733,532	13,576	12,064	25,640
19	Cawnpore ..	637,319	511,345	1,148,664	19,716	17,192	36,908
20	Fatehpur ..	341,527	310,865	652,392	10,354	9,009	19,363
21	Allahabad ..	722,188	682,257	1,404,445	23,591	20,543	44,134
	JHANSI DIVISION.						
22	Jhansi ..	315,590	290,909	606,499	14,299	13,368	27,667
23	Jalaun ..	213,384	192,055	405,439	7,521	6,614	14,135
24	Hamirpur ..	224,389	215,856	440,245	9,522	8,538	18,060
25	Banda ..	313,644	299,470	613,114	10,507	9,304	19,811
	BENARES DIVISION.						
26	Benares ..	461,688	439,624	901,312	16,787	15,594	32,381
27	Mirzapur ..	361,635	362,548	724,183	14,024	12,433	26,457
28	Jaunpur ..	574,480	580,625	1,155,105	17,441	15,229	32,670
29	Ghazipur ..	424,640	407,649	832,289	11,559	10,389	21,948
30	Ballia ..	426,520	404,489	831,009	13,124	11,689	24,813
	GORAKHPUR DIVISION.						
31	Gorakhpur ..	1,658,592	1,608,238	3,266,830	52,510	48,447	100,957
32	Basti ..	984,741	940,487	1,925,228	35,259	31,710	66,969
33	Azamgarh ..	776,269	752,388	1,528,657	24,111	21,590	45,701
	KUMAUN DIVISION.						
34	Naini Tal ..	160,798	116,077	276,875	4,188	3,711	7,899
35	Almora ..	265,253	265,085	530,338	10,852	10,554	21,406
36	Garhwal ..	232,863	252,323	485,186	9,962	9,488	19,450
	LUCKNOW DIVISION.						
37	Lucknow ..	392,559	331,785	724,344	14,714	13,547	28,261
38	Unao ..	433,613	385,515	819,128	12,879	11,184	24,063
39	Rae Bareli ..	474,742	461,661	936,403	12,775	11,077	23,852
40	Sitapur ..	581,655	507,826	1,089,481	22,648	20,245	42,893
41	Hardoi ..	586,166	498,244	1,084,410	20,433	18,265	38,698
42	Kheri ..	485,177	428,298	913,475	19,168	16,611	35,779
	FYZABAD DIVISION.						
43	Fyzabad ..	588,485	583,445	1,171,930	20,312	18,054	38,366
44	Gonda ..	752,896	720,202	1,473,098	20,656	17,291	37,947
45	Bahraich ..	554,548	510,829	1,065,377	19,832	17,493	37,325
46	Sultanpur ..	494,593	509,319	1,003,912	20,396	17,666	38,062
47	Partabgarh ..	417,339	437,791	855,130	14,645	12,825	27,470
48	Bara Banki ..	536,896	493,058	1,029,954	20,761	18,803	39,564
	Total for the Province..	23,787,745	21,588,042	45,375,787	864,154	771,296	1,635,450



## FORM No. I.

*United Provinces during the year 1923.*

5			6	7	8	9			10
Ratio of births per 1,000 of population.			Number of males born to every 100 females born.	Excess of births over deaths per 1,000 of population.	Excess of deaths over births per 1,000 of population.	Mean ratio of births per 1,000 during previous five years.			Number.
Male.	Female.	Total.				Male.	Female.	Total.	
14·15	12·14	26·29	116·53	6·15	..	12·11	10·19	22·30	1
23·49	20·87	44·36	112·57	17·52	..	21·00	18·70	39·70	2
22·07	18·73	40·80	117·81	22·75	..	18·86	16·26	35·12	3
22·67	19·80	42·47	114·50	17·81	..	21·17	18·48	39·65	4
25·05	21·90	46·95	114·42	16·26	..	20·67	18·56	39·23	5
22·83	20·27	43·10	112·60	17·26	..	19·45	17·50	36·95	6
17·85	15·72	33·57	113·60	14·71	..	16·98	14·67	31·65	7
22·93	20·53	43·46	111·66	17·83	..	19·76	18·04	37·80	8
16·17	14·06	30·23	114·99	10·45	..	15·57	13·40	28·97	9
16·34	14·66	31·00	111·43	11·30	..	17·56	15·68	33·24	10
22·57	20·74	43·31	108·85	20·07	..	20·42	18·87	39·29	11
25·87	23·47	49·34	110·19	25·81	..	21·15	19·21	40·36	12
21·17	18·88	40·05	112·14	16·49	..	18·84	16·88	35·72	13
24·90	22·71	47·61	109·66	22·21	..	21·51	19·63	41·14	14
23·16	21·34	44·50	108·53	17·49	..	21·40	19·83	41·23	15
24·60	22·67	47·27	108·52	20·69	..	20·59	19·12	39·71	16
21·06	18·75	39·81	112·33	9·21	..	21·05	19·13	40·18	17
18·51	16·44	34·95	112·53	11·37	..	19·05	17·27	36·32	18
17·16	14·97	32·13	114·68	3·64	..	17·35	15·34	32·69	19
15·87	13·81	29·68	114·93	8·90	..	17·20	15·47	32·67	20
16·79	14·63	31·42	114·84	8·38	..	17·52	16·03	33·55	21
23·58	22·04	45·62	106·96	10·25	..	21·24	19·67	40·91	22
18·55	16·31	34·86	113·71	9·41	..	19·55	17·72	37·27	23
21·63	19·39	41·02	111·52	2·43	..	21·15	19·44	40·59	24
17·14	15·17	32·31	112·93	3·42	..	15·89	13·90	29·79	25
18·62	17·30	35·92	107·65	4·55	..	18·93	17·75	36·68	26
19·36	17·17	36·53	112·80	9·39	..	16·68	15·38	32·06	27
15·10	13·18	28·28	114·52	8·71	..	15·55	14·03	29·58	28
13·89	12·48	26·37	111·26	·33	..	15·38	13·89	29·27	29
15·79	14·07	29·86	112·28	3·54	..	17·25	15·23	32·48	30
16·07	14·83	30·90	108·39	14·32	..	15·91	14·64	30·55	31
18·31	16·47	34·78	111·19	10·83	..	18·92	17·46	36·38	32
15·77	14·12	29·89	111·68	..	3·59	18·23	17·01	35·24	33
15·12	13·40	28·52	112·85	..	1·05	12·74	11·76	24·50	34
20·46	19·90	40·36	102·82	14·45	..	18·47	17·60	36·07	35
20·53	19·55	40·08	104·99	16·85	..	17·87	17·51	35·38	36
20·31	18·70	39·01	108·61	15·17	..	17·97	16·46	34·43	37
15·72	13·65	29·37	115·15	9·35	..	16·65	15·05	31·70	38
13·64	11·83	25·47	115·33	11·35	..	15·30	13·73	29·03	39
20·79	18·58	39·37	111·87	18·47	..	19·71	18·06	37·77	40
18·84	16·84	35·68	111·87	16·47	..	19·09	17·20	36·29	41
20·98	18·18	39·16	115·39	18·67	..	18·57	16·60	35·17	42
17·33	15·40	32·73	112·51	12·68	..	17·86	16·38	34·24	43
14·02	11·74	25·76	119·46	12·98	..	15·70	13·56	29·26	44
18·61	16·42	35·03	113·37	13·43	..	19·20	17·31	36·51	45
20·32	17·59	37·91	115·45	15·08	..	18·41	16·48	34·89	46
17·12	15·00	32·12	114·19	10·80	..	16·63	14·77	31·40	47
20·16	18·25	38·41	110·41	17·75	..	18·29	16·71	35·00	48
19·04	17·00	36·04	112·04	12·67	..	18·31	16·57	34·88	



*Births and deaths registered in the dist*

1	2	3	4	5			6		7		
Number.	District.	Area in square miles.	Average population per square mile.	Population (according to census of 1921).			Births.		Number of deaths registered.		
				Male.	Female.	Total.	Total number.	Birth rate per 1,000 of population.	Male.	Female.	Total.
<b>MEERUT DIVISION.</b>											
1	Dehra Dun ..	1,190	178	128,176	84,067	212,243	5,580	26·29	2,305	1,970	4,275
2	Saharanpur ..	2,135	439	515,908	421,563	937,471	41,583	44·36	13,134	12,029	25,163
3	Muzaffarnagar ..	1,673	475	434,307	359,958	794,265	32,410	40·80	7,535	6,751	14,286
4	Meerut ..	2,344	639	809,994	689,080	1,499,074	63,675	42·47	18,939	18,023	36,962
5	Bulandshahr ..	1,906	559	562,529	503,990	1,066,519	50,079	46·95	16,812	15,924	32,736
<b>AGRA DIVISION.</b>											
6	Aligarh ..	1,946	546	575,379	483,366	1,061,745	45,762	43·10	14,633	12,805	27,438
7	Muttra ..	1,450	427	341,150	277,988	619,138	20,788	33·57	6,405	5,272	11,677
8	Agra ..	1,855	498	508,298	415,857	924,155	40,166	43·46	12,582	11,109	23,691
9	Mainpuri ..	1,674	447	411,981	336,046	748,027	22,615	30·23	8,309	6,484	14,793
10	Etah ..	1,729	480	449,162	380,598	829,760	25,720	31·00	9,069	7,276	16,345
<b>ROHILKHAND DIVISION.</b>											
11	Bareilly ..	1,579	642	544,885	468,990	1,013,875	43,908	43·31	12,879	10,684	23,563
12	Bijnor ..	1,879	394	389,643	350,539	740,182	36,521	49·34	9,273	8,142	17,415
13	Budaun ..	2,010	485	527,823	447,524	975,347	39,068	40·05	12,775	10,203	22,978
14	Moradabad ..	2,285	524	639,022	559,631	1,198,653	57,073	47·61	16,227	14,216	30,443
15	Shahjahanpur ..	1,726	486	452,837	386,278	839,115	37,340	44·50	12,067	10,601	22,668
16	Pilibhit ..	1,350	320	229,130	202,471	431,601	20,404	47·27	6,243	5,230	11,473
<b>ALLAHABAD DIVISION.</b>											
17	Farrukhabad ..	1,683	509	469,009	387,624	856,633	34,109	39·81	14,220	11,997	26,217
18	Etawah ..	1,691	434	404,323	329,209	733,532	25,640	34·95	9,603	7,691	17,294
19	Cawnpore ..	2,372	484	637,319	511,345	1,148,664	36,908	32·13	18,008	14,715	32,723
20	Fatehpur ..	1,642	397	341,527	310,865	652,392	19,363	29·68	7,249	6,311	13,560
21	Allahabad ..	2,858	491	722,188	682,257	1,404,445	44,134	31·42	17,684	14,682	32,366
<b>JHANSI DIVISION.</b>											
22	Jhansi ..	3,634	167	315,590	290,909	606,499	27,667	45·62	11,487	9,965	21,452
23	Jalaun ..	1,549	262	213,384	192,055	405,439	14,135	34·86	5,684	4,633	10,317
24	Hamirpur ..	2,292	192	224,389	215,856	440,245	18,060	41·02	9,136	7,854	16,990
25	Banda ..	2,965	207	313,644	299,470	613,114	19,811	32·31	9,603	8,112	17,715
<b>BENARES DIVISION.</b>											
26	Benares ..	1,008	894	461,688	439,624	901,312	32,381	35·92	14,973	13,304	28,277
27	Mirzapur ..	5,233	138	361,635	362,548	724,183	26,457	36·53	10,812	8,846	19,658
28	Jaunpur ..	1,550	745	574,480	580,625	1,155,105	32,670	28·28	12,688	9,923	22,611
29	Ghazipur ..	1,392	598	424,640	407,649	832,289	21,948	26·37	11,428	10,245	21,673
30	Ballia ..	1,244	668	426,520	404,489	831,009	24,813	29·86	11,474	10,403	21,877
<b>GORAKHPUR DIVISION.</b>											
31	Gorakhpur ..	4,528	721	1,658,592	1,608,238	3,266,830	100,957	30·90	28,639	25,528	54,167
32	Basti ..	2,802	687	984,741	940,487	1,925,228	66,969	34·78	23,612	22,491	46,103
33	Azamgarh ..	2,213	691	776,269	752,388	1,528,657	45,701	29·89	25,722	25,452	51,174
<b>KUMAUN DIVISION.</b>											
34	Naini Tal ..	2,721	102	160,798	116,077	276,875	7,899	28·52	4,406	3,781	8,187
35	Almora ..	5,372	99	265,253	265,085	530,338	21,406	40·36	6,936	6,774	13,710
36	Garhwal ..	5,629	86	232,863	252,323	485,186	19,450	40·08	5,631	5,642	11,273
<b>LUCKNOW DIVISION.</b>											
37	Lucknow ..	967	749	392,559	331,785	724,344	28,261	39·01	9,128	8,139	17,267
38	Unao ..	1,787	458	433,613	385,515	819,128	24,063	29·37	9,055	7,347	16,402
39	Rae Bareli ..	1,745	537	474,742	461,661	936,403	23,852	25·47	7,247	5,972	13,219
40	Sitapur ..	2,250	484	581,655	507,826	1,089,481	42,893	39·37	12,107	10,664	22,771
41	Hardoi ..	2,232	486	586,166	498,244	1,084,410	38,698	35·68	11,625	9,208	20,833
42	Kheri ..	2,976	307	485,177	428,298	913,475	35,779	39·16	10,310	8,404	18,714
<b>FYZABAD DIVISION.</b>											
43	Fyzabad ..	1,732	677	588,485	583,445	1,171,930	38,366	32·73	12,337	11,162	23,499
44	Gonda ..	2,809	524	752,896	720,202	1,473,098	37,947	25·76	10,370	8,461	18,831
45	Bahraich ..	2,645	403	554,548	510,829	1,065,377	37,325	35·03	12,628	10,382	23,010
46	Sultanpur ..	1,713	586	494,593	509,319	1,003,912	38,062	37·91	12,290	10,631	22,921
47	Partabgarh ..	1,443	593	417,339	437,791	855,130	27,470	32·12	9,816	8,412	18,228
48	Bara Banki ..	1,759	585	536,896	493,058	1,029,954	39,564	38·41	11,632	9,647	21,279
Total for the Province		107,167	423	23,787,745	21,588,042	45,375,787	1,635,450	36·04	5,66,807	493,497	1,060,304

NOTE.—Those born dead are not included



Deaths per 1,000 of population from—															Mean ratio of deaths per 1,000 during previous five years.			Number.
Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and diarrhoea.	Respiratory diseases.	Injuries.	All other causes.	All causes.			Male.	Female.	Total.					
								Male.	Female.	Total.								
0	·02	·01	..	13·81	·92	1·83	·40	3·14	17·98	23·43	20·14	27·94	32·92	29·96	1			
9	·02	02	..	24 00	·33	·37	·25	1·85	25·46	28·53	26·84	43·88	48·30	45·88	2			
5	..	·01	·29	17·12	·04	·04	·30	·24	17·46	18·75	18 05	33·92	35·85	34·79	3			
3	·02	·01	2·03	20·12	·28	·79	·31	1·10	23·38	26·15	24·66	44·13	42 02	40·50	4			
3	·05	·06	·85	28·50	·14	·16	·33	·59	29·89	31·59	30·69	44·71	47·31	45·94	5			
7	·32	·05	·13	19·62	·70	·45	·39	4·17	25·43	26·33	25 84	47·82	50·96	49·26	6			
9	·04	·02	·07	15·33	·41	·95	·40	1·63	18·77	18 96	18 86	43·27	46·93	44·95	7			
3	·19	·06	·01	17·85	·38	1·99	·61	4·54	24·75	26·71	25·63	54·26	61·83	57·70	8			
5	·03	..	..	17·57	..	·03	·54	1·56	20·17	19·29	19·78	40·80	42·22	41 44	9			
4	·15	·01	..	15 70	·25	·21	·38	2·98	20·19	19·12	19·70	44·93	44·35	44·72	10			
5	·05	·01	..	19·57	·17	·64	·41	2·38	23·64	22·78	23 24	50·81	51·83	51·27	11			
9	·01	..	..	18·33	·24	·22	·61	4·11	23·80	23·23	23 53	56·75	58·40	57 52	12			
1	·02	..	..	21·84	·13	·14	·49	·93	24·20	22·80	23 56	50·95	51·03	50·99	13			
5	·02	·01	..	22·27	·46	·92	·45	1·27	25·39	25·40	25 40	55·59	58·27	56 84	14			
3	·02	..	·29	20·13	·21	·86	·59	4 91	26·65	27·44	27 01	53·48	54·28	53 85	15			
7	·21	..	·24	20·59	·18	·94	·50	3·92	27·25	25·83	26 58	54·18	52·70	53 49	16			
3	..	..	·08	23·84	·26	·84	·51	5·06	30·32	30·95	30 60	54·94	60·43	57 42	17			
3	·01	..	..	17·17	·19	·44	·46	5·30	23·75	23·36	23 58	48·74	53·53	50 91	18			
8	..	..	2·65	·7 14	·42	2·26	·50	5 50	28 25	28·78	28 49	47·47	51·76	49 41	19			
6	..	..	2·34	13 27	·01	·02	·67	4·47	21·22	20·30	20 78	46·89	47·61	47 24	20			
5	·02	·16	·64	15 53	·21	·91	·39	5·17	24·49	21 52	23 04	46·07	44·33	45 22	21			
7	..	..	·16	27·38	·39	·79	·68	5 95	26 40	34·25	35 37	48·59	50·82	49 68	22			
3	..	..	..	19·53	·13	·81	·57	4·40	26·64	24·12	25 45	43·10	44·96	44 00	23			
2	..	..	·28	27·46	·12	9·63	·60	·49	40·71	36·38	38 59	54·88	55·49	55 19	24			
8	..	·01	1·68	20·92	·07	·18	·64	5·38	30·62	27·09	28 89	46·34	44·88	45 63	25			
4	·14	·01	2·19	19·04	·36	2·30	·53	6·20	32·43	30·26	31 37	49·09	48·37	48 79	26			
2	·02	·04	·04	21·14	·13	·15	·55	5·07	29 90	24·40	27 14	44·77	41·12	42 93	27			
6	·01	·01	·96	13·88	·08	·08	·68	3·86	22·09	17·09	19 57	43·65	38·80	41 21	28			
5	·24	..	6·11	16·57	·03	·03	·51	2·51	23·91	25·13	26 04	41·13	39·64	40 40	29			
9	·62	·01	8·44	13·18	·34	·05	·64	3·04	26·90	25·72	26 32	17·30	35·73	36 53	30			
9	·05	..	2·84	11·50	·04	·12	·47	1·56	17·27	15·87	16 58	31·21	28·46	29 84	31			
8	·02	..	4·75	14·27	·01	..	·39	4·48	23·98	23·91	23 95	42·34	39·68	41 03	32			
6	·05	·01	13·89	15·33	·11	·10	·61	3·37	33 13	33·83	33 48	46·32	45·64	45 99	33			
3	·43	..	..	26·30	·50	1·12	·36	·84	27·40	32·57	29 57	43·82	49·95	46 5	34			
3	..	·03	..	22·17	1·42	·97	·33	·99	26·26	25·55	25 91	38·38	40·75	39 55	35			
0	..	..	..	18·28	3·27	·58	·54	·53	24 18	22 36	23 23	40 35	39·76	40 05	36			
5	·01	·02	·05	12 30	·83	3 64	·43	6·51	23·25	24 53	23 84	43·89	46·70	45 18	37			
5	..	..	1·62	15·52	·03	·05	·46	2·33	20·83	19·06	20 02	49·42	49·76	49 58	38			
5	·01	·05	·19	11·32	·05	·03	·45	2·01	15·26	12·93	14 12	45·13	42·32	43 74	39			
3	..	..	·53	16·52	·12	·08	·60	3·04	20·81	21·00	20 90	50·60	51·40	50 93	40			
5	·02	·01	..	15·52	·08	·08	·57	2·92	19 83	18·48	19 21	47 00	46·79	46 90	41			
8	·03	..	..	17·58	·01	·01	·49	2·36	21·25	19 62	20 49	46·41	44·00	45 28	42			
3	·01	..	3·39	12·23	·15	·32	·55	3 39	20·96	19·13	20 05	42·96	39·38	41 17	43			
6	·08	..	·20	10·34	·03	·05	·43	1 65	13·77	11·75	12 78	37·44	32·25	34 89	44			
3	..	..	·26	15·84	·05	·06	·46	4 92	22·77	20·32	21 60	43·23	44·15	46 27	45			
0	..	..	·26	17·63	·01	·07	·41	4 44	24·85	20·87	22 83	53·57	48·56	51 03	46			
9	·01	·02	..	16·95	·01	·06	·27	3 99	23·52	19 21	21 32	48·01	43 08	45 48	47			
8	·02	..	·82	15·81	·04	·05	·49	3 43	21·66	19 56	20 66	47 52	46 09	46 83	48			
5	·06	·02	1·63	17 19	·24	·57	·48	3 17	23 83	22 86	23 37	45 33	44 99	45 17				

or any other statements.



## Deaths registered in the districts of the United

1	2					
Num- ber.	District.	January.	February.	March.	April.	May.
MEERUT DIVISION.						
1	Dehra Dun .. ..	238	243	268	289	385
2	Saharanpur .. ..	1,395	1,148	1,454	1,660	2,290
3	Muzaffarnagar .. ..	1,029	705	828	922	1,349
4	Meerut .. ..	2,037	1,578	2,287	3,298	4,024
5	Bulandshahr .. ..	2,224	1,551	1,559	2,345	2,787
AGRA DIVISION.						
6	Aligarh .. ..	1,981	1,676	1,874	1,877	2,038
7	Muttra .. ..	884	740	847	860	1,123
8	Agra .. ..	1,783	1,550	1,668	1,766	2,309
9	Mainpuri .. ..	1,741	1,503	1,136	991	998
10	Etah .. ..	1,724	1,451	1,172	1,236	1,230
ROHILAKHAND DIVISION.						
11	Bareilly .. ..	2,421	1,640	1,748	1,765	2,106
12	Bijnor .. ..	1,515	1,057	1,111	1,108	1,501
13	Budaun .. ..	2,584	1,809	1,418	1,669	1,822
14	Moradabad .. ..	2,370	1,769	1,912	2,142	2,457
15	Shahjahanpur .. ..	2,043	1,570	1,649	1,548	2,157
16	Pilibhit .. ..	926	863	788	693	976
ALLAHABAD DIVISION.						
17	Farrukhabad .. ..	2,824	2,199	2,166	2,003	1,963
18	Etawah .. ..	1,257	1,278	1,466	1,384	1,463
19	Cawnpore .. ..	2,672	3,203	3,424	3,131	2,829
20	Fatehpur .. ..	1,704	1,525	1,472	1,309	731
21	Allahabad .. ..	3,117	2,497	2,415	2,263	2,670
JHANSI DIVISION.						
22	Jhansi .. ..	1,489	1,304	1,569	1,237	1,538
23	Jalaun .. ..	724	716	759	537	602
24	Hamirpur .. ..	1,116	952	991	797	979
25	Banda .. ..	1,539	1,494	1,457	963	1,276
BENARES DIVISION.						
26	Benares .. ..	2,118	1,832	2,462	2,087	2,797
27	Mirzapur .. ..	1,288	1,593	1,267	1,467	1,183
28	Jaunpur .. ..	2,135	1,832	1,732	2,039	1,495
29	Ghazipur .. ..	1,939	2,000	3,080	2,738	1,258
30	Ballia .. ..	1,905	3,106	2,759	2,481	1,135
GORAKHPUR DIVISION.						
31	Gorakhpur .. ..	4,832	4,814	6,542	4,606	3,480
32	Basti .. ..	4,312	4,952	5,923	4,096	3,941
33	Azamgarh .. ..	6,220	7,757	10,478	5,241	2,891
KUMAUN DIVISION.						
34	Naini Tal .. ..	786	537	533	653	927
35	Almora .. ..	695	591	798	843	1,685
36	Garhwal .. ..	655	627	625	613	1,310
LUCKNOW DIVISION.						
37	Lucknow .. ..	1,249	1,048	1,207	1,379	1,689
38	Unao .. ..	1,769	1,645	1,592	1,487	1,267
39	Rae Bareilly .. ..	1,282	1,257	1,130	1,056	1,309
40	Sitapur .. ..	1,876	1,515	1,683	1,578	2,148
41	Hardoi .. ..	2,002	1,440	1,400	1,355	1,617
42	Kheri .. ..	1,557	1,112	1,135	1,354	1,676
FYZABAD DIVISION.						
43	Fyzabad .. ..	2,052	2,327	2,791	2,109	1,713
44	Gonda .. ..	1,340	1,013	1,155	1,421	1,353
45	Bahraich .. ..	1,832	1,592	1,571	1,720	1,461
46	Sultanpur .. ..	1,470	1,322	1,723	1,727	2,166
47	Partabgarh .. ..	1,152	1,039	1,215	1,219	1,557
48	Bara Banki .. ..	1,344	1,151	1,647	1,614	1,821
Total for the Province .. ..		89,147	82,076	91,886	82,782	84,987
Ratio of deaths per 1,000 of po- pulation.		1.96	1.81	2.02	1.82	1.87



## FORM No. III.

Provinces during **each month** of the year 1923.

3							4	5
June.	July.	August.	September.	October.	November.	December.	Total deaths registered during the year.	Num- ber.
476	396	310	377	472	479	342	4,275	1
2,379	1,398	1,612	2,719	3,712	3,097	2,299	25,163	2
1,352	1,233	1,027	1,172	1,639	1,502	1,575	14,336	3
4,226	3,206	2,349	3,137	3,974	2,859	3,987	36,962	4
3,908	2,860	2,047	2,919	4,030	2,733	3,773	32,736	5
2,553	2,031	1,834	3,146	2,909	2,886	2,633	27,438	6
1,250	749	792	1,129	1,220	1,216	862	11,677	7
2,524	1,750	1,656	2,814	2,159	1,912	1,800	23,691	8
1,179	1,280	1,017	1,155	1,198	1,095	1,500	14,793	9
1,089	1,035	1,164	1,431	1,694	1,477	1,612	16,345	10
1,951	1,675	1,915	1,531	2,868	2,378	1,565	23,563	11
1,769	1,350	1,076	1,392	1,953	1,779	1,804	17,415	12
1,705	1,729	1,597	2,084	2,401	2,076	2,084	22,978	13
2,656	2,301	2,095	2,880	3,786	2,958	3,117	30,443	14
1,31	1,742	1,854	1,795	2,524	1,993	1,862	22,668	15
980	762	855	999	1,161	1,245	1,225	11,473	16
1,756	1,983	1,836	1,999	2,505	2,178	2,799	26,217	17
1,808	1,195	1,208	1,356	1,700	1,754	1,425	17,294	18
3,275	2,198	2,171	2,296	2,508	2,411	2,605	32,723	19
1,110	912	755	819	1,075	950	1,198	13,560	20
3,392	2,293	2,431	2,772	3,088	2,872	2,646	32,366	21
2,470	1,588	1,602	2,077	2,549	2,237	1,692	21,452	22
975	793	965	978	977	1,174	1,117	10,317	23
1,953	1,513	1,269	1,915	2,406	1,755	1,844	16,990	24
1,867	1,347	1,174	1,471	1,830	1,760	1,537	17,715	25
2,574	1,838	2,577	2,916	2,980	2,473	2,173	28,277	26
2,092	1,750	1,621	1,750	1,778	1,981	1,885	19,658	27
1,904	1,086	1,601	1,857	2,041	2,133	2,176	22,611	28
1,490	1,209	1,182	1,542	1,784	1,642	1,829	21,673	29
1,234	1,280	1,370	1,911	1,758	1,197	1,741	21,877	30
3,279	3,478	3,555	5,033	4,837	4,709	5,002	54,167	31
3,303	3,193	3,330	2,544	3,675	3,383	3,448	46,103	32
2,464	2,076	2,449	2,649	2,992	2,935	3,022	51,174	33
824	600	579	595	671	682	730	8,187	34
2,139	1,570	1,600	1,018	1,100	887	814	13,740	35
1,469	1,446	1,338	939	1,074	601	676	11,273	36
2,017	1,326	1,601	1,553	1,409	1,393	1,393	17,267	37
1,441	1,150	1,036	1,037	1,281	1,205	1,492	16,402	38
1,172	1,213	870	818	951	1,142	1,019	13,219	39
2,295	2,060	1,854	1,820	1,982	1,986	1,974	22,771	40
1,940	1,426	1,539	1,698	2,175	2,049	2,192	20,833	41
1,549	1,820	1,487	1,561	1,698	1,941	1,821	18,714	42
1,666	1,636	1,592	2,034	1,669	1,878	2,032	23,499	43
1,796	1,785	1,639	1,785	1,992	1,799	1,753	18,831	44
2,224	1,823	1,822	2,036	2,315	2,283	2,331	23,010	45
2,112	1,612	1,839	1,796	2,240	2,625	2,389	22,921	46
1,790	1,394	1,437	1,367	1,842	2,176	2,040	18,223	47
2,429	2,070	1,778	2,039	1,791	1,685	1,877	21,279	48
95,717	78,793	76,207	88,691	102,333	93,570	94,115	1,060,304	
2 11	1 74	1 68	1 95	2 25	2 03	2 07	25 37	



## Deaths registered according to age in the districts

1	2		Not exceeding one month.						
Number.	District.	Male.			Female.			Total.	
		Under one week.	Over one week.	Total.	Under one week.	Over one week.	Total.		
MEERUT DIVISION.									
1	Dehra Dun ...	193	71	267	135	65	200	467	
2	Saharanpur ...	1,230	787	2,017	1,283	768	2,054	4,071	
3	Muzaffarnagar ...	380	349	729	336	311	677	1,406	
4	Meerut ...	1,315	837	2,202	1,224	789	2,013	4,215	
5	Bulandshahr ...	1,202	761	1,933	1,039	663	1,702	3,665	
AGRA DIVISION.									
6	Aligarh ...	1,430	719	2,199	1,133	554	1,687	3,886	
7	Muttra ...	367	271	638	302	192	494	1,132	
8	Agra ...	1,212	765	1,977	1,073	608	1,681	3,658	
9	Mainpuri ...	726	287	1,013	619	273	892	1,905	
10	Etah ...	753	430	1,183	587	367	954	2,137	
ROHILKHAND DIVISION.									
11	Bareilly ...	1,755	636	2,421	1,506	575	2,081	4,502	
12	Bijnor ...	1,133	497	1,630	981	419	1,400	3,030	
13	Budaun ...	1,344	672	2,016	1,130	583	1,713	3,729	
14	Moradabad ...	1,564	1,000	2,564	1,329	779	2,108	4,672	
15	Shahjahanpur ...	1,567	437	2,054	1,471	412	1,883	3,937	
16	Pilibhit ...	876	330	1,206	724	264	988	2,194	
ALLAHABAD DIVISION.									
17	Farrukhabad ...	2,002	490	2,492	1,732	408	2,140	4,632	
18	Etawah ...	876	488	1,364	755	483	1,238	2,602	
19	Cawnpore ...	1,682	712	2,394	1,218	531	1,748	4,142	
20	Fatehpur ...	631	332	993	649	257	906	1,899	
21	Allahabad ...	2,202	911	3,113	1,724	734	2,458	5,571	
JHANSI DIVISION.									
22	Jhansi ...	1,195	440	1,635	1,089	414	1,503	3,133	
23	Jalaun ...	430	264	694	320	189	509	1,203	
24	Hamirpur ...	787	510	1,297	694	398	1,092	2,389	
25	Banda ...	698	440	1,138	617	306	923	2,031	
BENARES DIVISION.									
26	Benares ...	1,133	829	1,932	896	693	1,589	3,551	
27	Mirzapur ...	1,150	543	1,693	979	375	1,354	3,047	
28	Jaunpur ...	1,174	596	1,770	948	427	1,375	3,145	
29	Ghazipur ...	822	278	1,100	684	190	874	1,974	
30	Ballia ...	1,105	242	1,347	826	187	1,013	2,360	
GORAKHPUR DIVISION.									
31	Gorakhpur ...	2,154	1,345	3,499	1,625	975	2,600	6,099	
32	Basti ...	52	2,379	2,431	44	2,082	2,126	4,557	
33	Azamgarh ...	1,504	682	2,186	1,178	583	1,761	3,947	
KUMAUN DIVISION.									
34	Naini Tal ...	199	148	347	192	141	333	680	
35	Almora ...	260	222	482	219	190	409	891	
36	Garhwal ...	206	184	390	148	157	305	695	
LUCKNOW DIVISION.									
37	Lucknow ...	1,092	621	1,713	885	459	1,344	3,057	
38	Unao ...	736	377	1,113	553	318	871	1,984	
39	Rae Bareli ...	617	333	950	521	279	800	1,750	
40	Sitapur ...	1,039	721	1,760	958	615	1,573	3,333	
41	Hardoi ...	1,165	534	1,699	895	463	1,358	3,057	
42	Kheri ...	949	416	1,365	808	317	1,125	2,490	
FYZABAD DIVISION.									
43	Fyzabad ...	1,150	647	1,797	933	519	1,452	3,249	
44	Gonda ...	882	56	1,388	772	419	1,191	2,579	
45	Bahraich ...	1,503	587	2,090	1,288	504	1,792	3,832	
46	Sultanpur ...	1,610	749	2,359	1,374	625	1,999	4,358	
47	Partabgarh ...	929	575	1,504	833	515	1,348	2,852	
48	Bara Banki ...	1,479	523	2,002	1,120	399	1,519	3,521	
Total for the province ...		50,543	27,603	78,146	42,382	22,773	65,155	143,301	
Population ...		...	...	...	...	...	...	...	
Ratio per 1,000 living ...		...	...	...	...	...	...	...	



## FORM No. IV.

of the United Provinces during the year 1923.

3									4	
Under one year.									1 and under 5 years.	
Over one month and not exceeding six months.			Over six months and not exceeding twelve months.			Total.			Male.	Female.
Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.		
221	178	399	109	99	208	597	477	1,074	313	276
1,330	1,246	2,576	1,090	950	2,040	4,437	4,250	8,687	2,463	2,313
925	762	1,687	648	502	1,150	2,302	1,941	4,243	1,609	1,317
2,124	1,892	4,016	1,674	1,342	3,016	6,000	5,247	11,247	3,900	3,582
1,598	1,591	3,189	1,203	1,098	2,301	4,764	4,391	9,155	4,633	4,133
1 187	1,043	2 230	823	678	1,501	4,209	3,408	7 617	2 589	2,232
468	414	882	294	245	539	1,400	1,153	2,553	1,087	835
1,116	981	2,097	755	652	1,407	3,848	3,314	7,162	2,020	1,894
515	421	936	236	193	429	1,764	1,506	3,270	777	613
532	453	985	295	241	536	2,010	1,648	3,658	1,249	1,102
1,326	1,161	2,487	742	657	1,399	4,489	3,899	8,388	2,186	1,972
917	817	1,734	640	600	1,240	3 187	2,317	6,004	1,670	1,635
1,079	1,001	2,080	657	596	1,253	3,752	3,310	7,062	2,016	1,737
1,698	1,535	3,233	1,172	1,109	2,281	5,434	4,752	10,186	3,385	3,172
1,124	957	2,081	801	767	1,568	3,979	3,607	7,586	2,332	2,263
583	511	1,094	379	321	700	2,168	1,820	3,988	1,205	1,121
887	826	1,713	598	528	1,126	3 977	3,494	7,471	1,800	1,616
860	666	1,526	421	310	731	2,645	2,214	4,859	881	712
1 482	1,139	2,621	877	610	1,487	4,753	3,437	8,250	2,246	1,881
448	360	808	213	187	400	1,654	1,453	3,107	616	550
1,390	1,054	2,444	549	466	1,015	5,052	3,978	9,030	2,191	2,031
971	861	1,832	624	537	1,161	3,230	2,901	6,131	2,028	1,954
482	407	889	230	180	410	1,406	1,096	2,502	634	514
826	674	1,500	430	321	751	2,553	2,087	4,640	1,587	1,483
607	507	1,114	242	224	466	1,987	1,654	3,641	880	783
1,032	845	1,877	853	696	1,549	3,847	3,130	6,977	1,903	1,799
834	605	1,439	283	241	524	2 810	2,200	5 010	1,343	1,334
904	527	1,431	277	223	500	2,951	2,125	5,076	1,059	928
432	341	773	159	131	290	1,691	1,346	3,037	1,093	1,109
339	234	573	180	126	306	1,866	1,373	3,239	1,421	1,319
1,951	1,501	3,452	797	524	1,321	6,247	4,625	10,872	4,014	3,612
2,461	2,033	4,494	955	837	1,792	5,847	4,996	10,843	3,417	3,308
1,128	922	2,050	414	278	692	3,728	2,961	6,689	2,721	2,886
268	217	515	293	263	556	908	843	1,751	472	474
534	543	1,080	296	326	622	1,312	1,281	2 593	1,089	1,186
427	488	915	454	409	863	1,271	1,202	2,473	978	942
759	634	1,393	595	557	1,152	3,067	2,535	5,602	1,669	1,622
624	515	1,139	301	235	536	2,038	1,621	3,659	1,039	967
433	342	775	214	150	364	1,597	1,292	2,889	1,007	866
1,150	1,079	2,229	797	642	1,439	3,707	3,294	7,001	2,648	2,348
1,054	897	1,951	557	479	1 036	3,310	2,734	6,044	1,833	1,591
985	854	1,839	759	618	1,377	3,109	2,597	5,706	2,531	2,231
894	718	1 612	369	322	691	3,060	2,492	5,552	1,655	1,476
940	838	1,778	417	343	760	2,745	2,372	5 117	2,103	1,754
1,003	853	1 856	567	435	1,002	3,660	3,080	6,740	2,784	2,309
1,048	858	1,906	458	356	814	3,865	3,213	7,078	1,832	1,657
981	854	1,835	349	262	611	2,834	2,464	5,298	1,319	1,172
960	801	1,761	538	417	955	3,500	2,737	6,237	2,661	1,758
45,837	38,989	84,826	26,534	22,283	48,867	150,567	126,427	276,994	88,408	80,369
...	...	...	...	...	...	714,286	674,414	1,388,700	2,023,596	2,098,014
...	...	...	...	...	...	210,79	187,46	199,46	43,69	38,31



Deaths registered **according to age** in the districts

Number.	District.	5 and under 10 years.		10 and under 15 years.		15 and under 20 years.		20 and under 30 years.	
		Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
MEERUT DIVISION.									
1	Dehra Dun ...	78	79	63	61	77	108	185	245
2	Saharanpur ...	530	383	378	313	325	308	775	995
3	Muzaffarnagar ...	337	295	236	222	204	191	393	571
4	Meerut ...	839	885	650	646	503	638	1 097	1,557
5	Bulandshahr ...	776	723	433	385	421	450	973	1,279
AGRA DIVISION.									
6	Aligarh ...	605	499	459	374	503	524	1,003	1,244
7	Muttra ...	245	191	200	154	215	202	556	594
8	Agra ...	535	468	377	323	372	434	968	1,117
9	Mainpuri ...	269	194	234	159	290	254	782	759
10	Etah ...	379	279	306	234	318	304	742	726
ROHILKHAND DIVISION.									
11	Bareilly ...	467	357	304	264	364	370	885	881
12	Bijnor ...	467	357	292	217	256	277	563	691
13	Budaun ...	470	334	363	251	287	312	875	857
14	Moradabad ...	717	599	404	347	306	392	876	1,071
15	Shahjahanpur ...	391	339	319	254	257	282	606	623
16	Pilibhit ..	273	251	214	155	154	161	343	409
ALLAHABAD DIVISION.									
17	Farrukhabad ...	489	381	421	291	433	433	904	1,058
18	Etawah ...	268	218	252	198	275	256	983	843
19	Cawnpore ...	675	702	695	668	622	660	1,456	1,551
20	Fatehpur ...	343	316	300	273	213	179	713	703
21	Allahabad ...	907	793	603	504	472	445	1,375	1,266
JHANSI DIVISION									
22	Jhansi ...	598	481	352	226	316	263	766	616
23	Jalaun ...	231	177	220	149	248	162	536	397
24	Hamirpur ...	507	423	264	172	199	144	659	488
25	Banda ...	430	413	414	323	316	251	1,059	829
BENARES DIVISION.									
26	Benares ...	947	906	737	612	604	577	1,147	1,173
27	Mirzapur ...	676	532	455	337	313	223	1,088	897
28	Jaunpur ...	762	580	639	455	540	377	1,201	982
29	Ghazipur ...	962	930	670	604	367	353	1,075	1,128
30	Ballia ...	1,166	1,180	857	759	500	449	972	1,079
GORAKHPUR DIVISION.									
31	Gorakhpur ...	2,018	1,987	1,509	1,370	1,031	889	2,441	2,633
32	Basti ...	1,848	1,833	1,394	1,351	809	717	1,825	2,028
33	Azamgarh ...	2,915	3,323	2,054	2,009	1,035	1,067	2,414	2,860
KUMAON DIVISION									
34	Naini Tal ...	285	248	278	212	280	238	434	392
35	Almora ...	413	502	313	318	234	288	575	585
36	Garhwal ...	267	278	222	239	174	209	422	507
LUCKNOW DIVISION.									
37	Lucknow ...	272	253	180	188	173	294	536	694
38	Unao ...	406	364	363	302	278	219	735	713
39	Rae Bareilly ...	321	303	224	195	212	191	595	575
40	Sitapur ...	451	478	283	294	306	314	741	832
41	Hardoi ...	417	383	301	231	222	223	741	682
42	Kheri ...	388	288	234	173	182	186	545	513
FYZABAD DIVISION.									
43	Fyzabad ...	836	821	599	632	524	526	1,001	1,053
44	Gonda ...	47	312	248	199	208	148	587	587
45	Bahraich ...	614	453	350	267	303	244	711	746
46	Sultanpur ...	551	439	334	253	242	176	822	728
47	Partabgarh ...	434	384	344	238	198	129	680	541
48	Bara Banki ...	453	396	331	319	253	251	764	760
Total for the Province		29,724	27,331	21,685	18,720	16 934	16,348	42,123	44,057
Population		3,351,783	3,039,972	2,898,415	2,196,894	2,038,900	1,609,368	3,999,332	3,789,203
Ratio per 1,000 living		8.87	8.99	7.48	8.52	8.30	10.16	10.53	11.63



## FORM No. IV.

*of the United Provinces during the year 1923—(concluded).*

9		10		11		12		13		14
30 and under 40 years.		40 and under 50 years.		50 and under 60 years.		60 years and upwards.		Total.		Number.
Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
162	170	181	141	229	131	420	282	2,305	1 970	1
852	804	843	663	873	658	1,658	1,282	13,134	12 029	2
378	500	446	385	526	426	1,124	903	7,585	6,751	3
898	1,137	1,047	895	1,177	1,089	2,738	2,347	18,939	18,023	4
819	983	880	789	1,113	1,001	2,000	1,790	16,812	15,924	5
990	1,042	1,103	891	1,209	917	1,960	1,674	14,633	12 805	6
524	449	540	403	625	418	1,013	873	6,405	5,272	7
869	839	978	708	961	705	1,654	1,307	12,582	11,109	8
921	711	1,099	726	1,068	717	1,105	845	8,309	6,484	9
702	623	896	574	1,054	736	1,413	1,050	9,069	7,276	10
894	722	974	609	985	596	1,331	1,015	12,879	10,684	11
586	491	567	436	674	505	1,011	716	9,273	8,142	12
958	740	1,134	659	1,163	754	1,757	1,249	12,775	10,203	13
917	841	1,054	657	1,142	799	1,992	1,586	16 227	14,216	14
666	600	902	584	1,073	754	1,542	1,295	12,067	10 601	15
442	264	442	235	437	289	560	525	6,243	5,230	16
1,151	1,019	1,440	1,086	1,560	1,127	2,045	1,492	14,220	11 997	17
996	839	1,243	798	976	743	1,084	870	9,603	7 691	18
1,554	1,459	1,860	1,377	2,067	1,388	2,080	1,532	18,003	14,715	19
792	757	889	760	816	602	913	718	7,249	6 311	20
1,628	1,356	1,795	1,308	1,755	1,364	1,906	1,634	17,684	14,682	21
962	721	1,022	723	938	778	1,265	1,302	11,487	9 965	22
519	422	654	504	603	469	633	743	5,684	4,633	23
706	570	848	668	840	708	973	1,111	9,136	7,854	24
1,261	966	1,160	926	1,021	873	1,075	1,064	9,603	8,112	25
1,158	958	1,150	923	1,145	955	2,335	2,271	14,973	13,304	26
1,055	842	1,198	778	876	737	998	936	10,812	8,846	27
1,335	999	1,192	938	1,219	982	1,790	1,557	12,688	9,923	28
1,238	1,063	1,272	1,065	1,240	1,038	1,820	1,609	11 428	10,245	29
1,083	1,066	894	742	855	686	1,861	1,750	11,474	10,403	30
2,636	2,424	2,429	2,084	2,709	2,395	3,605	3,509	28,639	25,528	31
1,947	1,965	1,819	1,616	2,038	1,845	2,663	2,827	23,612	22,491	32
2,699	2,890	2,491	2,155	2,408	2,194	3,247	2,107	25,722	23,452	33
500	426	448	354	410	326	391	268	4,406	3,731	34
468	510	555	424	694	543	1,283	1,137	6,966	6,774	35
399	428	430	387	568	444	850	1,006	5,631	5,642	36
572	543	575	390	571	369	1,523	1,231	9,123	8 139	37
742	704	992	685	1,054	781	1,408	991	9,055	7,347	38
675	611	750	564	890	588	976	784	7,247	5,972	39
893	791	842	563	835	636	1,399	1,164	12,107	10,664	40
838	673	967	619	1,238	831	1,708	1,241	11,625	9,208	41
666	491	726	456	669	448	1,260	1,021	10,310	8,404	42
983	1,020	950	700	1,031	838	1,709	1,604	12,337	11,162	43
772	622	799	527	842	619	1,649	1,321	10,370	8,461	44
793	684	906	565	926	631	1,581	1,403	12,623	10,382	45
861	752	863	646	1,118	956	1,802	1,811	12,290	10,631	46
772	673	887	724	1,029	827	1,319	1,260	9,816	8,412	47
815	758	788	643	926	698	1,741	1,327	11,632	9,647	48
45,045	40,918	47,970	36,053	50,176	38,934	74,175	64 340	566,807	493,497	
3,416,415	3,147,346	2,552,757	2,320,241	1,592,005	1,450,417	1,200,254	1,262,103	*23,787,745	+21,588,042	
13.18	13.00	18.79	15.54	31.52	26.84	61.80	50.98	23.83	22.86	

\* Includes 2 persons of unspecified ages.

† „ 4 „ „ „



Paragraph 25.]

ANNUAL

Deaths registered **according to classes and sexes**

1	2	Population					
Number.	District.	Muhammadans.			Hindus.		
		Male.	Female.	Total.	Male.	Female.	Total.
MEERUT DIVISION.							
1	Dehra Dun ... ..	19,174	10,757	29,931	103,997	69,571	173,568
2	Saharanpur ... ..	167,821	140,585	308,406	335,801	272,231	608,032
3	Muzaffarnagar ... ..	122,061	104,270	226,331	295,836	242,406	538,242
4	Meerut ... ..	183,384	159,274	342,658	584,032	495,014	1,079,046
5	Bulandshahr ... ..	104,228	94,813	199,041	437,660	390,468	828,128
AGRA DIVISION.							
6	Aligarh ... ..	71,812	60,550	132,362	484,713	409,054	893,767
7	Muttra ... ..	32,532	26,651	59,183	302,155	246,266	548,421
8	Agra ... ..	60,417	49,724	110,141	434,327	356,244	790,571
9	Mainpuri ... ..	21,096	18,190	39,286	380,613	309,805	690,418
10	Etah ... ..	46,750	40,161	86,911	389,634	329,142	718,776
ROHILKHAND DIVISION.							
11	Bareilly ... ..	138,725	124,025	262,750	393,311	334,068	727,379
12	Bijnor ... ..	137,488	127,922	265,410	242,444	214,484	456,928
13	Budaun ... ..	88,126	77,902	166,028	429,587	360,795	790,382
14	Moradabad ... ..	228,916	207,132	436,048	395,270	339,146	734,416
15	Shahjahanpur ... ..	67,711	62,068	129,779	382,171	321,726	703,897
16	Pilibhit ... ..	40,711	38,338	79,049	186,295	162,274	348,569
ALLAHABAD DIVISION.							
17	Farrukhabad ... ..	52,430	47,229	99,659	411,672	336,112	747,784
18	Etawah ... ..	22,911	20,088	42,999	377,097	305,602	682,699
19	Cawnpore ... ..	62,911	48,742	111,653	568,932	458,813	1,027,745
20	Fatehpur ... ..	38,316	37,507	75,823	301,761	272,144	573,905
21	Allahabad ... ..	92,807	86,170	178,977	624,241	592,678	1,216,919
JHANSI DIVISION.							
22	Jhansi ... ..	18,161	14,782	32,943	288,606	209,529	558,135
23	Jalaun ... ..	13,765	12,809	26,574	198,652	178,483	377,135
24	Hamirpur ... ..	14,071	14,530	28,601	209,739	200,493	410,232
25	Banda ... ..	18,004	17,900	35,904	295,046	281,037	576,083
BENARES DIVISION.							
26	Benares ... ..	49,279	45,000	94,279	411,010	393,371	804,381
27	Mirzapur ... ..	21,967	21,277	43,244	338,498	339,998	678,496
28	Jaunpur ... ..	49,995	51,508	101,563	524,105	528,726	1,052,831
29	Ghazipur ... ..	36,198	39,586	75,784	388,124	337,760	755,884
30	Ballia ... ..	25,625	26,667	52,292	400,129	377,131	777,260
GORAKHPUR DIVISION.							
31	Gorakhpur ... ..	168,843	161,793	330,641	1,487,976	1,445,011	2,932,987
32	Basti ... ..	167,210	158,583	325,793	817,286	781,720	1,599,006
33	Azamgarh ... ..	91,967	91,427	183,394	683,828	660,511	1,344,339
KUMAUN DIVISION.							
34	Naini Tal ... ..	32,983	22,779	55,762	124,272	90,422	214,694
35	Almora ... ..	1,840	1,183	3,023	262,557	262,907	525,464
36	Garhwal ... ..	2,695	1,134	3,829	229,561	250,664	480,225
LUCKNOW DIVISION.							
37	Lucknow ... ..	81,140	70,580	151,720	305,608	257,928	563,536
38	Unao ... ..	36,895	33,496	70,391	396,139	351,542	747,681
39	Rae Bareli ... ..	41,810	41,944	83,754	432,678	419,514	852,192
40	Sitapur ... ..	86,271	78,632	164,903	494,684	408,597	923,281
41	Hardoi ... ..	62,736	55,759	118,495	521,518	440,805	962,323
42	Kheri ... ..	70,989	64,092	135,081	413,423	363,554	776,977
FYZABAD DIVISION.							
43	Fyzabad ... ..	63,927	63,908	127,835	523,141	519,051	1,042,192
44	Gonda ... ..	126,188	121,798	247,986	626,311	598,121	1,224,432
45	Bahraich ... ..	113,000	103,892	216,892	440,749	406,257	847,006
46	Sultanpur ... ..	55,769	60,622	116,391	438,688	448,533	887,221
47	Partabgarh ... ..	45,808	47,726	93,534	371,353	389,911	761,264
48	Bara Banki ... ..	90,688	87,311	177,999	445,584	405,191	850,775
	Total for the Province ... ..	3,388,151	3,092,581	6,481,032	20,130,814	18,274,810	38,405,624



## FORM No. V.

in the districts of the United Provinces during the year 1923.

3									4
According to census of 1921.									
Christians.			Other classes.			Total.			Number.
Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	
2,933	2,673	5,606	2,072	1,066	3,138	128,176	84,067	212,243	1
3,293	2,186	5,479	8,993	6,561	15,554	515,908	421,563	937,471	2
3,451	2,964	6,415	12,959	10,318	23,277	434,307	359,958	794,265	3
16,995	14,125	31,120	25,583	20,667	46,250	809,994	689,080	1,499,074	4
6,203	6,208	12,411	14,438	12,501	26,939	562,529	503,990	1,066,519	5
7,665	7,455	15,120	11,189	9,307	20,496	575,379	486,366	1,061,745	6
3,320	2,767	6,087	3,143	2,304	5,447	341,150	277,988	619,138	7
4,199	2,621	6,820	9,355	7,268	16,623	508,298	415,857	924,155	8
1,552	1,383	2,935	8,720	6,668	15,388	411,981	336,046	748,027	9
6,298	5,732	12,030	6,480	5,563	12,043	449,162	380,598	829,760	10
7,186	6,522	13,708	5,663	4,375	10,038	544,885	468,990	1,013,875	11
812	840	1,652	8,899	7,293	16,192	389,643	350,539	740,182	12
6,935	6,201	13,136	3,175	2,626	5,801	527,823	447,524	975,347	13
8,714	8,002	16,716	6,122	5,351	11,473	639,022	559,631	1,198,653	14
1,768	1,687	3,455	1,187	797	1,984	452,837	386,278	839,115	15
1,426	1,271	2,697	698	588	1,286	229,130	202,471	431,601	16
1,561	1,455	3,016	3,346	2,828	6,174	469,009	387,624	856,633	17
693	549	1,242	3,622	2,970	6,592	404,323	329,209	733,532	18
3,564	2,368	5,932	1,912	1,422	3,334	637,319	511,345	1,148,664	19
227	172	399	1,223	1,042	2,265	341,527	310,865	652,392	20
4,102	2,776	6,878	1,038	633	1,671	722,188	682,257	1,404,445	21
2,770	1,382	4,152	6,053	5,216	11,269	315,590	230,909	606,499	22
138	113	251	829	650	1,479	213,384	192,055	405,439	23
188	476	664	391	357	748	224,389	215,856	440,245	24
96	71	167	498	462	960	313,644	299,470	613,114	25
933	924	1,857	466	329	795	461,688	439,624	901,312	26
369	427	796	801	846	1,647	361,635	362,548	724,183	27
71	50	121	309	281	590	574,480	580,625	1,155,105	28
193	181	374	125	122	247	424,640	407,649	832,289	29
485	462	947	281	229	510	426,520	404,489	831,009	30
468	385	853	1,305	1,044	2,349	1,658,592	1,608,238	3,266,830	31
58	56	114	187	128	315	984,741	940,437	1,925,228	32
70	47	117	404	403	807	776,269	752,388	1,528,657	33
1,343	1,101	2,444	2,200	1,775	3,975	160,793	116,077	276,875	34
671	876	1,547	185	119	304	265,253	265,085	530,338	35
491	483	974	116	42	158	232,863	252,323	485,186	36
4,818	2,712	7,530	993	565	1,558	392,559	331,785	724,344	37
100	75	175	479	402	881	433,613	335,515	819,128	38
96	74	170	158	129	287	474,742	461,661	936,403	39
301	286	587	399	311	710	581,655	507,826	1,089,481	40
448	540	988	1,464	1,140	2,604	586,166	498,244	1,084,410	41
338	258	596	427	394	821	485,177	428,298	913,475	42
1,151	275	1,426	266	211	477	588,485	583,445	1,171,930	43
284	202	486	113	81	194	752,896	720,202	1,473,098	44
149	101	250	650	579	1,229	554,548	510,829	1,065,377	45
34	96	130	102	68	170	494,593	509,319	1,003,912	46
9	10	19	169	144	313	417,339	437,791	855,130	47
55	74	129	569	482	1,051	536,896	493,058	1,029,954	48
109,024	91,694	200,718	159,756	128,657	288,413	23,787,745	21,588,642	45,375,787	



Paragraph 25.]

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## Deaths registered according to classes and sexes

1		2							
		Muhammadans.			Hindus.				
District.		Male.	Female.	Total.	Male.	Female.	Total.		
MEERUT DIVISION.									
1	Dehra Dun	324	305	629	1,942	1,627	3,569		
2	Saharanpur	4,454	4,294	8,748	8,529	7,686	16,315		
3	Muzaffarnagar	2,153	1,943	4,096	5,414	4,797	10,211		
4	Meerut	4,388	4,327	8,715	14,412	13,580	27,992		
5	Bulandshahr	3,237	3,163	6,400	13,483	12,694	26,182		
AGRA DIVISION.									
6	Aligarh	1,939	1,740	3,688	12,684	11,051	23,735		
7	Muttra	569	528	1,097	5,833	4,737	10,570		
8	Agra	1,382	1,396	2,778	11,177	9,693	20,870		
9	Mainpuri	332	314	646	7,966	6,164	14,130		
10	Etah	784	603	1,387	8,268	6,646	14,914		
ROHILKHAND DIVISION.									
11	Bareilly	2,948	2,520	5,468	9,872	8,099	17,971		
12	Bijnor	3,114	2,823	5,937	6,094	5,265	11,359		
13	Budaun	2,137	1,811	3,948	10,601	8,357	18,958		
14	Moradabad	5,721	5,281	11,002	10,442	8,885	19,327		
15	Shahjahanpur	1,764	1,625	3,389	10,252	8,934	19,186		
16	Palibhit	1,141	1,020	2,161	5,065	4,177	9,242		
ALLAHABAD DIVISION.									
17	Farrukhabad	1,320	1,161	2,481	12,890	10,802	23,722		
18	Etawah	605	527	1,132	8,995	7,160	16,155		
19	Cawnpore	2,322	1,947	4,269	15,675	12,763	28,438		
20	Fatehpur	830	793	1,623	6,419	5,518	11,937		
21	Allahabad	2,257	2,063	4,325	15,400	12,601	28,001		
JHANSI DIVISION.									
22	Jhansi	446	458	904	10,968	9,429	20,397		
23	Jaloun	336	274	610	5,346	4,358	9,704		
24	Hamirpur	495	399	894	8,638	7,449	16,087		
25	Banda	645	591	1,236	8,955	7,514	16,469		
BENARES DIVISION.									
26	Benares	1,731	1,800	3,531	13,233	11,497	24,730		
27	Mirzapur	548	449	997	10,261	8,393	18,654		
28	Jaunpur	991	805	1,796	11,697	9,117	20,814		
29	Ghazipur	1,073	1,106	2,179	10,352	9,135	19,487		
30	Ballia	766	724	1,490	10,706	9,678	20,384		
GORAKHPUR DIVISION.									
31	Gorakhpur	2,807	2,488	5,295	25,828	23,032	48,860		
32	Basti	4,147	4,055	8,202	19,465	18,436	37,901		
33	Azamgarh	3,767	3,878	7,645	21,948	21,561	43,509		
KUMAUN DIVISION.									
34	Naini Tal	1,134	858	1,992	3,258	2,902	6,160		
35	Almora	27	44	71	6,914	6,713	13,627		
36	Garhwal	22	17	39	5,605	5,613	11,218		
LUCKNOW DIVISION.									
37	Lucknow	2,233	2,272	4,505	6,821	5,831	12,652		
38	Unao	641	523	1,164	8,413	6,823	15,236		
39	Rae Bareilly	725	686	1,411	6,517	5,282	11,799		
40	Satapur	1,984	1,891	3,875	10,117	8,771	18,888		
41	Hardoi	1,189	1,044	2,233	10,432	8,155	18,587		
42	Kheri	1,241	1,061	2,302	9,067	7,341	16,408		
FYZABAD DIVISION.									
43	Fyzabad	1,472	1,531	3,003	10,863	9,631	20,494		
44	Gonda	1,533	1,336	2,869	8,833	7,125	15,958		
45	Bahraich	2,353	1,981	4,334	10,262	8,387	18,649		
46	Sultanpur	1,273	1,233	2,506	11,017	9,398	20,415		
47	Partabgarh	834	752	1,586	8,982	7,660	16,642		
48	Bara Bani	1,992	1,740	3,732	9,638	7,906	17,544		
Total for the Province		80,126	74,194	154,320	485,654	418,403	904,057		



## FORM No. V.

in the districts of the United Provinces during the year 1923—(continued).

5										
Number of deaths registered.										
Christians.			Other classes.			Total.			Number.	
Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.		
36	36	72	3	2	5	2 305	1 970	4,275	1	
8	8	16	43	41	84	13,134	12,029	25,163	2	
3	3	6	15	8	23	7,585	6,751	14,336	3	
16	17	33	123	99	222	18,959	18,023	36,982	4	
9	11	20	78	55	134	16 812	15,924	32,736	5	
6	4	10	4	1	5	14 633	12,805	27,438	6	
3	4	7	...	3	3	6,405	5,272	11,677	7	
18	17	35	5	3	8	12,582	11,109	23,691	8	
1	...	1	10	6	16	8,309	6,484	14,793	9	
1	4	5	16	23	39	9,069	7,276	16,345	10	
23	20	43	36	45	81	12 879	10,684	23,563	11	
11	5	16	54	49	103	9 273	8,142	17,415	12	
6	4	10	31	31	62	12,775	10,203	22,978	13	
41	23	64	23	27	50	16,227	14,216	30,443	14	
4	7	11	46	36	82	12,067	10,601	22,668	15	
3	...	3	34	33	67	6,243	5,230	11,473	16	
4	3	7	6	1	7	14 220	11,997	26,217	17	
3	3	6	...	1	1	9,603	7,691	17,294	18	
10	5	15	1	...	1	18,008	14,715	32,723	19	
...	...	...	...	...	...	7,249	6,311	13,560	20	
26	12	38	1	1	2	17,684	14,682	32,366	21	
16	7	23	57	71	128	11,487	9,965	21,452	22	
...	...	...	2	1	3	5,684	4,633	10,317	23	
3	6	9	...	...	...	9,136	7,854	16,990	24	
...	3	3	3	4	7	9,603	8,112	17,715	25	
8	7	15	1	...	1	14,973	13,304	28,277	26	
3	4	7	...	...	...	10,812	8,846	19,658	27	
...	1	1	...	...	...	12 688	9,923	22,611	28	
2	4	6	1	...	1	11,428	10 245	21,673	29	
2	1	3	...	...	...	11,474	10,403	21,877	30	
2	2	4	2	6	8	28 639	25,528	54 167	31	
...	...	...	...	...	...	23,612	22,491	46 103	32	
1	1	2	6	12	18	25,722	25,452	51,174	33	
10	19	29	4	2	6	4 406	3,781	8,187	34	
18	15	33	7	2	9	6,966	6,774	13,740	35	
4	11	15	..	1	1	5,631	5,642	11,273	36	
55	26	81	19	10	29	9,128	8,139	17,267	37	
1	1	2	...	...	..	9,055	7,347	16,402	38	
5	3	8	...	1	1	7,247	5,972	13,219	39	
5	...	5	1	2	3	12,107	10 664	22,771	40	
4	6	10	...	3	3	11,625	9,208	20,833	41	
2	...	2	...	2	2	10,310	8,404	18,714	42	
2	...	2	...	...	...	12,337	11,162	23,499	43	
3	...	3	1	...	1	10,370	8,461	18,831	44	
...	...	...	13	14	27	12,628	10,382	23,010	45	
...	...	...	...	...	...	12,290	10,631	22,921	46	
...	...	...	...	...	...	9,816	8 412	18,228	47	
1	...	1	1	1	2	11,632	9,647	21,279	48	
379	303	682	647	598	1,245	566,807	493,497	1,060,304		



Paragraph 23.]

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Deaths registered **according to classes and sexes**

1	2							
Number.	District.		Muhammadans.			Hindus.		
			Male.	Female.	Total.	Male.	Female.	Total.
MEERUT DIVISION.								
1	Dehra Dun	...	16·90	28·35	21·01	18·67	23·39	20·56
2	Saharanpur	...	26·54	30·54	28·36	25·70	28·23	26·83
3	Muzaffarnagar	...	17·64	18·63	18·10	18·30	19·79	18·97
4	Meerut	...	23·93	27·17	25·43	24·68	27·43	25·94
5	Bulandshahr	...	31·06	33·36	32·15	30·82	32·51	31·61
AGRA DIVISION.								
6	Aligarh	...	27·00	28·88	27·86	26·17	27·01	26·56
7	Muttra	...	17·49	19·81	18·53	19·30	19·23	19·27
8	Agra	...	22·87	28·07	25·22	25·73	27·21	26·40
9	Mainpuri	...	15·74	17·26	16·44	20·93	19·90	20·46
10	Etah	...	16·77	15·01	15·96	21·22	20·19	20·75
ROHILKHAND DIVISION.								
11	Bareilly	...	21·25	20·32	20·43	25·10	24·24	24·71
12	Bijnor	...	22·65	22·07	22·37	25·14	24·55	24·86
13	Budaun	...	24·25	23·25	23·73	24·68	23·16	23·98
14	Moradabad	...	24·99	25·49	25·23	26·42	26·20	26·32
15	Shahjahanpur	...	26·05	26·18	26·11	26·82	27·77	27·26
16	Pilibhit	...	28·03	26·65	27·34	27·19	25·74	26·51
ALLAHABAD DIVISION.								
17	Farrukhabad	...	25·18	24·58	24·89	31·31	32·23	31·72
18	Etawah	...	26·41	26·23	26·33	23·85	23·43	23·66
19	Cawnpore	...	36·91	39·94	38·23	27·55	27·82	27·67
20	Fatehpur	...	21·66	21·14	21·40	21·27	20·28	20·80
21	Allahabad	...	24·32	24·00	24·16	24·67	21·26	23·01
JHANSI DIVISION.								
22	Jhansi	...	24·56	30·98	27·44	38·00	34·98	36·54
23	Jalaun	...	24·41	21·39	22·95	26·91	24·42	25·73
24	Hamirpur	...	35·18	27·46	31·26	41·18	37·15	39·21
25	Banda	...	35·82	33·02	34·42	30·35	26·74	28·59
BENARES DIVISION.								
26	Benares	...	35·13	40·00	37·45	32·20	29·23	30·74
27	Mirzapur	...	24·95	21·10	23·05	30·31	24·68	27·49
28	Jaunpur	...	19·82	15·61	17·68	22·32	17·24	19·77
29	Ghazipur	...	29·64	27·94	28·75	26·67	24·84	25·78
30	Ballia	...	29·89	27·15	28·49	26·76	25·66	26·22
GORAKHPUR DIVISION.								
31	Gorakhpur	...	16·62	15·38	16·01	17·36	15·94	16·66
32	Basti	...	24·80	25·57	25·17	23·82	23·58	23·70
33	Azamgarh	...	40·96	42·42	41·69	32·09	32·64	32·36
KUMAUN DIVISION.								
34	Naini Tal	...	34·38	37·67	35·72	26·22	32·09	28·69
35	Almora	...	14·67	37·19	23·49	26·33	25·53	25·93
36	Garhwal	...	8·16	14·99	10·18	24·42	22·39	23·36
LUCKNOW DIVISION.								
37	Lucknow	...	27·52	32·19	29·69	22·32	22·61	22·45
38	Unao	...	17·37	15·61	16·54	21·24	19·41	20·33
39	Rae Bareilly	...	17·34	16·35	16·85	15·06	12·59	13·84
40	Sitapur	...	23·00	24·05	23·50	20·45	20·46	20·46
41	Hardoi	...	18·95	18·72	18·84	20·00	18·50	19·31
42	Kheri	...	17·48	16·55	17·04	21·93	20·19	21·1
FYZABAD DIVISION.								
43	Fyzabad	...	23·03	23·96	23·49	20·76	18·55	19·66
44	Gonda	...	12·15	10·97	11·57	14·10	11·91	13·03
45	Bahraich	...	20·82	19·07	19·98	23·28	20·64	22·02
46	Sultanpur	...	22·83	20·34	21·53	25·11	20·95	23·01
47	Partabgarh	...	18·21	15·76	16·96	24·19	19·64	21·86
48	Bara Banki	...	21·93	19·93	20·97	21·63	19·51	20·62
Total for the Province			23·65	23·99	23·81	24·12	22·89	23·54



## FORM No. V.

in the districts of the United Provinces during the year 1923—(concluded).

7									8
Ratio of deaths per 1,000 of population.									Number.
Christians.			Other classes.			Total.			
Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	
12.27	13.47	12.84	1.45	1.88	1.59	17.93	23.43	20.14	1
2.43	3.66	2.92	4.78	6.25	5.40	25.46	28.53	26.84	2
.87	1.01	.93	1.16	.77	.99	17.46	18.75	18.05	3
.94	1.20	1.06	4.81	4.79	4.80	23.38	26.15	24.66	4
1.45	1.77	1.61	5.49	4.48	4.97	29.89	31.59	30.69	5
.78	.54	.66	.36	.11	.24	25.43	26.33	25.84	6
.90	1.44	1.15	...	1.30	.55	18.77	18.96	18.86	7
4.29	6.49	5.13	.53	.41	.48	24.75	26.71	25.63	8
.64	...	.34	1.15	.90	1.04	20.17	19.29	19.78	9
.16	.70	.41	2.47	4.13	3.24	20.19	19.12	19.70	10
3.20	3.07	3.14	6.36	10.28	8.07	23.64	22.78	23.24	11
13.55	5.95	9.68	6.07	6.72	6.36	23.80	23.23	23.53	12
.83	.64	.76	9.76	11.80	10.69	24.20	22.80	23.56	13
4.70	2.87	3.83	3.76	5.04	4.36	25.39	25.40	25.40	14
2.26	4.15	3.18	38.75	45.17	41.33	26.65	27.44	27.01	15
2.10	...	1.11	48.71	56.12	52.10	27.25	25.83	26.58	16
2.56	2.06	2.32	1.79	.35	1.13	30.32	30.95	30.60	17
4.33	5.46	4.83	...	.34	.15	23.75	23.36	23.58	18
2.80	2.11	2.53	.52	...	.30	28.25	23.78	28.49	19
6.34	4.32	5.52	...	...	...	21.22	20.30	20.78	20
5.78	5.06	5.54	.96	1.58	1.20	24.49	21.52	23.04	21
15.96	12.60	13.55	9.42	13.61	11.36	36.40	34.25	35.37	22
...	42.25	17.96	2.41	1.54	2.03	26.64	24.12	25.45	23
8.57	7.57	8.08	...	...	...	40.71	36.38	38.59	24
8.13	9.37	8.79	6.02	8.66	7.29	30.62	27.09	28.89	25
...	20.00	8.26	...	...	...	32.43	30.26	31.37	26
10.36	22.10	16.04	2.14	...	1.26	29.90	24.40	27.14	27
4.12	2.16	3.17	...	...	...	22.09	17.09	19.57	28
4.27	5.19	4.69	8.00	...	4.05	26.91	25.13	26.04	29
...	...	...	...	...	...	26.90	25.72	26.32	30
14.28	21.28	17.09	1.53	5.75	3.40	17.27	15.87	16.53	31
7.45	17.26	11.86	...	...	...	23.98	23.91	23.95	32
26.82	17.12	21.33	14.85	19.78	22.30	33.13	33.83	33.48	33
8.15	22.77	15.40	...	...	...	27.40	32.57	29.57	34
11.41	9.59	10.76	1.82	1.13	1.51	26.26	25.55	25.91	35
10.00	13.33	11.44	37.84	16.81	29.60	24.18	22.36	23.23	36
52.08	40.54	47.06	...	23.81	6.33	23.25	24.53	23.84	37
16.61	...	8.52	...	...	...	20.88	19.06	20.02	38
8.93	11.11	10.12	2.51	7.75	3.48	15.26	12.93	14.12	39
5.92	...	3.33	...	6.43	4.22	20.81	21.00	20.90	40
1.74	...	1.40	...	2.63	1.15	19.83	18.48	19.21	41
10.56	...	6.17	...	5.08	2.44	21.25	19.62	20.49	42
...	...	...	...	...	...	20.96	19.13	20.05	43
...	...	...	8.85	...	5.15	13.77	11.75	12.78	44
...	...	...	20.00	24.18	21.97	22.77	20.32	21.60	45
...	...	...	...	...	...	24.85	20.87	22.83	46
...	...	...	...	...	...	23.52	19.21	21.32	47
18.18	...	7.75	1.76	2.08	1.90	21.66	19.56	20.66	48
3.48	3.30	3.40	4.05	4.65	4.32	23.83	22.86	23.37	



Deaths from **different causes** and Births registered in the **Towns**  
(such towns) of the United

1	2	3	4				5	6	7
Number.	Districts and towns.	Popula- tion according to census of 1921.	Births.			Birth-rate per 1,000 of popula- tion.	Cholera.	Small-pox.	Plague.
			Male.	Female.	Total.				
A.—Rural Districts.									
MEERUT DIVISION.									
1	Dehra Dun ...	166,269	2,360	1,956	4,316	25.96	3	2	...
2	Saharanpur ...	802,435	18,733	16,442	35,175	43.83	..	4	...
3	Muzaffarnagar ...	743,280	16,471	13,816	30,287	40.75	..	8	229
4	Meerut ...	1,388,632	31,494	27,371	58,865	42.39	12	11	2,588
5	Bulandshahr ...	994,155	24,654	21,570	46,224	46.49	54	2	850
AGRA DIVISION.									
6	Aligarh ...	943,001	21,000	18,476	39,476	41.86	212	7	135
7	Muttra ...	555,782	9,531	8,258	17,789	32.01	10	4	44
8	Agra ...	740,222	15,991	13,853	29,844	40.32	64	6	8
9	Mainpuri ...	723,301	11,768	10,239	22,007	30.42	38	...	2
10	Etah ...	798,597	12,784	11,445	24,229	30.34	123	7	1
ROHILKHAND DIVISION.									
11	Bareilly ...	881,568	20,493	18,694	39,187	44.45	48	7	...
12	Bijnor ...	645,057	16,589	15,018	31,607	49.00	5	...	...
13	Budaun ...	909,071	18,958	16,902	35,860	39.45	17	1	5
14	Moradabad ...	1,008,785	24,425	22,232	46,657	46.25	11	6	...
15	Shahjahanpur ...	753,749	17,391	16,026	33,417	44.33	...	...	245
16	Pilibhit ...	399,257	9,646	8,850	18,496	46.33	89	...	104
ALLAHABAD DIVISION.									
17	Farrukhabad ...	790,044	16,493	14,744	31,237	39.54	3	1	68
18	Etawah ...	691,974	12,456	10,945	23,401	33.82	4	...	1
19	Cawnpore ...	953,579	15,594	13,541	29,135	30.55	...	4	2,968
20	Fatehpur ...	637,444	10,111	8,757	18,868	29.60	...	...	1,525
21	Allahabad ...	1,258,840	20,183	17,429	37,612	29.88	12	65	897
JHANSI DIVISION.									
22	Jhansi ...	523,056	12,362	11,536	23,898	45.26	2	2	99
23	Jalaun ...	380,899	6,852	6,037	12,889	33.84	1	...	1
24	Hamirpur ...	428,597	9,257	8,281	17,538	40.92	...	1	124
25	Banda ...	593,085	10,149	9,044	19,193	32.36	2	2	634
BENARES DIVISION.									
26	Benares ...	705,939	11,926	10,760	22,686	32.13	124	4	1,805
27	Mirzapur ...	669,189	12,620	11,258	23,878	35.68	11	22	27
28	Jaunpur ...	1,122,536	16,813	14,720	31,533	28.09	4	15	1,098
29	Ghazipur ...	807,581	11,212	10,040	21,252	26.31	179	2	5,070
30	Ballia ...	812,794	12,857	11,461	24,318	29.92	457	6	6,622
GORAKHPUR DIVISION.									
31	Gorakhpur ...	3,203,835	51,084	47,088	98,172	30.64	127	9	9,090
32	Basti ...	1,997,537	35,148	31,637	66,785	35.01	49	1	8,908
33	Azamgarh ...	1,483,371	23,448	21,013	44,461	29.97	80	10	20,205
KUMAUN DIVISION.									
34	Naini Tal ...	255,907	3,715	3,292	7,007	27.38	116	...	...
35	Almora ...	530,338	10,852	10,554	21,406	40.36	1	18	...
36	Garhwal ...	485,186	9,962	9,488	19,450	40.09	1	...	...
LUCKNOW DIVISION.									
37	Lucknow ...	507,177	9,435	8,604	18,039	35.57	2	4	36
38	Unao ...	807,981	12,612	10,950	23,562	29.16	1	1	1,325
39	Rae Bareli ...	920,220	12,406	10,704	23,110	25.11	14	4	176
40	Sitapur ...	1,048,342	21,611	19,250	40,861	38.98	3	1	514
41	Hardoi ...	1,037,228	19,288	17,252	36,540	35.23	18	...	1
42	Kheri ...	901,079	19,096	16,567	35,663	39.58	26	...	...
FYZABAD DIVISION.									
43	Fyzabad ...	1,102,530	19,000	16,847	35,847	32.51	9	2	3156
44	Gonda ...	1,443,739	19,997	16,778	36,775	25.47	113	3	289
45	Bahraich ...	1,038,006	19,356	17,097	36,453	35.12	...	3	275
46	Sultanpur ...	1,003,912	20,396	17,666	38,062	37.91	5	4	260
47	Partabgarh ...	855,130	14,645	12,825	27,470	32.12	6	19	1
48	Bara Banki ...	1,007,258	20,377	18,344	38,621	38.34	20	3	841
Total of Rural districts		42,372,494	793,501	705,657	1,499,158	35.38	2,076	271	70,517



## FORM No. VI.

(having a population of 10,000 and upwards) and **districts** (exclusive of Provinces during the year 1923.

8	9	10	11						12	13	
Fevers.	Dysentery and diarrhoea.	Respiratory diseases.	Injuries.						All other causes.	Total deaths from all causes.	Number.
			Suicide.		Wounds or accidents.	Snake-bite or killed by wild beasts.	Rabies.	Total.			
			Male.	Female.							
2,554	115	149	3	1	37	5	...	46	323	3,192	1
19,230	37	56	4	6	131	22	3	166	520	20,013	2
12,434	4	9	10	50	160	9	2	231	99	13,014	3
29,154	51	292	22	70	318	20	3	433	724	33,265	4
28,200	23	20	13	36	206	31	...	286	414	29,849	5
18,940	55	50	16	26	246	53	2	343	3,038	22,780	6
8,138	11	2	4	15	155	30	...	204	456	8,869	7
13,550	31	48	26	48	249	48	6	377	2,601	16,685	8
12,837	3	17	18	61	268	50	4	401	1,149	14,447	9
12,486	89	120	12	37	218	36	11	314	2,276	15,416	10
18,753	75	74	8	14	185	172	...	379	1,681	21,017	11
12,131	43	28	6	27	149	202	3	387	2,424	15,023	12
19,824	35	33	12	39	275	108	1	435	440	20,790	13
23,337	33	37	9	13	194	150	4	370	331	24,125	14
15,876	5	20	23	56	208	158	17	462	3,476	20,084	15
8,341	12	18	4	7	103	84	...	198	1,518	10,280	16
19,650	25	52	14	74	236	71	4	399	3,583	23,781	17
11,915	3	8	13	29	213	55	...	310	3,216	15,457	18
16,246	28	118	8	26	299	110	4	447	3,210	23,021	19
8,407	3	12	3	12	308	113	1	437	2,911	13,295	20
20,168	14	69	8	28	358	118	3	515	5,530	27,270	21
14,807	70	177	19	50	193	78	11	351	3,037	18,545	22
7,383	22	17	10	36	90	69	1	206	1,714	9,344	23
11,930	39	4,036	11	43	145	63	1	263	164	16,557	24
12,319	19	62	7	33	187	150	...	377	3,114	16,529	25
12,050	24	64	4	8	234	80	2	328	3,271	17,760	26
14,273	29	40	6	16	206	137	1	366	3,341	18,109	27
15,559	8	12	15	57	480	197	2	751	4,275	21,722	28
13,517	...	10	...	11	297	103	1	412	2,028	21,218	29
10,809	249	29	2	9	350	163	...	524	2,442	21,338	30
36,733	53	213	9	35	871	565	21	1,501	4,588	52,314	31
27,397	22	10	2	10	492	240	6	750	8,611	45,748	32
23,107	71	73	14	77	582	230	16	919	4,949	49,414	33
7,141	60	94	1	3	44	35	...	83	120	7,614	34
11,756	751	515	6	22	104	43	1	176	523	13,740	35
8,870	1,587	282	8	24	154	73	3	262	271	11,273	36
6,735	47	108	1	3	119	23	1	147	1,484	8,563	37
12,494	8	6	6	16	278	72	...	372	1,821	16,028	38
10,281	9	11	11	33	315	51	5	415	1,701	12,611	39
17,292	21	35	16	26	343	243	2	630	2,878	21,374	40
16,046	36	35	43	77	342	103	11	576	2,808	19,520	41
15,976	4	9	21	35	269	125	2	452	2,161	18,628	42
13,349	9	20	7	21	446	123	...	597	3,447	20,589	43
14,636	38	72	4	8	366	240	4	622	2,343	18,116	44
16,464	44	41	3	4	226	246	5	484	5,168	22,479	45
17,699	7	73	7	11	295	95	2	410	4,463	22,921	46
14,495	12	50	5	16	175	38	2	236	3,409	18,228	47
15,900	3	2	9	17	335	139	2	502	3,367	20,638	48
731,189	3,942	7,328	483	1,376	12,454	5,369	170	19,852	117,418	952,593	



Paragraphs 26, 38, 40, 44, 46, 50, 52 and 53.]

## ANNUAL FORM No. VI.

Deaths from **different causes** and Births registered in the **Towns** (having a population of 10,000 and upwards) and **districts** (exclusive of such towns) of the United Provinces during the year 1923—(contd.).

1	2	3	14									
Number.	Districts and towns.	Popula- tion according to census of 1921.	Ratio of deaths per 1,000 of population.									
			Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and diarrhoea.	Respiratory dis- eases.	Injuries.	All other causes.	From all causes.	
											For the year.	Mean ratio of previous five years.
A.—Rural Districts.— (concd.)												
MEERUT DIVISION.												
1	Dehra Dun ...	166,269	·02	·01	...	15·36	·69	·90	·28	1·94	19·20	28·37
2	Saharanpur ...	802,435	...	...	...	23·93	·05	·07	·21	·65	24·94	45·60
3	Muzaffarnagar ...	743,230	...	·01	·31	16·73	...	·01	·31	·13	17·51	34·81
4	Meerut ...	1,388,632	·01	·01	1·86	20·99	·04	·21	·31	·52	23·95	40·62
5	Bulandshahr ...	994,155	·05	...	·85	28·36	·02	·02	·29	·42	30·02	45·99
AGRA DIVISION.												
6	Aligarh ...	943,001	·22	·01	·14	20·08	·06	·05	·36	3·22	24·16	48·36
7	Muttra ...	555,782	·02	·01	·08	14·64	·02	...	·37	·82	15·96	42·60
8	Agra ...	740,222	·09	·01	·01	18·30	·04	·06	·51	3·51	22·54	56·78
9	Mainpuri ...	723,301	·05	...	...	17·75	...	·02	·55	1·59	19·97	41·87
10	Etah ...	798,597	·15	·01	...	15·63	·11	·15	·39	2·85	19·30	44·13
ROHILKHAND DIVISION.												
11	Bareilly ...	881,568	·05	·01	...	21·27	·08	·08	·43	1·91	23·84	53·84
12	Bijnor ..	645,057	·01	...	...	18·81	·07	·04	·60	3·76	23·29	58·93
13	Budaun ...	909,071	·02	...	...	21·81	·04	·04	·48	·48	22·87	50·70
14	Moradabad ...	1,008,785	·01	...	...	23·13	·03	·04	·37	·33	23·91	57·54
15	Shahjahanpur ...	753,749	...	...	·32	21·03	·01	·03	·61	4·61	26·64	55·11
16	Pilibhit ...	399,257	·22	...	·26	20·89	·03	·04	·49	3·80	25·75	53·32
ALLAHABAD DIVISION.												
17	Farrukhabad ...	790,044	...	...	·09	24·87	·03	·03	·50	4·53	30·10	58·03
18	Etawah ...	691,974	...	...	...	17·22	...	·01	·45	4·65	22·34	50·19
19	Cawnpore ...	953,579	...	...	3·11	17·04	·03	·12	·47	3·37	24·14	46·22
20	Fatehpur ...	637,444	...	...	2·39	13·19	...	·02	·68	4·57	20·86	47·51
21	Allahabad ...	1,258,840	·01	·05	·71	16·02	·01	·05	·41	4·39	21·66	45·19
JHANSI DIVISION.												
22	Jhansi ...	528,056	...	...	·19	28·04	·13	·33	·66	5·75	35·12	50·13
23	Jalaun ...	380,899	...	...	...	19·38	·06	·04	·54	4·50	24·53	43·32
24	Hamirpur ...	428,597	...	...	·29	27·83	·09	9·42	·61	·38	38·63	55·30
25	Banda ...	593,085	...	...	1·07	20·77	·03	·10	·63	5·25	27·87	45·53
BENARES DIVISION.												
26	Benares ...	705,939	·17	...	2·68	17·07	·03	·09	·46	4·63	25·16	44·73
27	Mirzapur ...	669,189	·02	·03	·04	21·33	·04	·06	·55	4·99	27·06	42·34
28	Jaunpur ...	1,122,536	...	·01	·98	13·86	·01	·01	·67	3·81	19·35	41·12
29	Ghazipur ...	807,581	·22	...	6·28	16·74	...	·01	·51	2·51	26·27	40·83
30	Ballia ...	812,794	·56	·01	8·39	13·30	·31	·03	·64	3·00	26·25	36·82
GORAKHPUR DIVISION.												
31	Gorakhpur ...	3,203,835	·04	..	2·84	11·46	·02	·07	·47	1·43	16·33	29·72
32	Basti ...	1,907,537	·02	...	4·67	14·36	·01	...	·39	4·51	23·98	41·06
33	Azamgarh ...	1,483,371	·05	·01	13·62	15·58	·05	·05	·62	3·33	33·31	46·27
KUMAUN DIVISION.												
34	Naini Tal ...	255,907	·45	..	...	27·90	·23	·37	·32	·47	29·75	45·84
35	Almora ...	530,338	...	·03	...	22·17	1·42	·97	·33	·99	25·91	39·55
36	Garhwal ...	485,186	...	...	...	18·28	3·27	·58	·54	·56	23·23	40·05
LUCKNOW DIVISION.												
37	Lucknow ...	507,177	...	·01	·07	13·28	·09	·21	·29	2·93	16·88	43·72
38	Unao ...	807,981	...	...	1·64	15·46	·01	·01	·43	2·25	19·84	49·54
39	Rae Bareli ...	920,220	·01	...	·19	11·17	·01	·01	·45	1·85	13·70	43·60
40	Sitapur ...	1,048,342	...	...	·49	16·49	·02	·03	·60	2·74	20·39	51·18
41	Hardoi ...	1,037,228	·02	...	...	15·47	·03	·03	·55	2·71	18·82	47·06
42	Kheri ...	901,079	·03	...	...	17·73	...	·01	·50	2·40	20·67	45·64
FYZABAD DIVISION.												
43	Fyzabad ...	1,102,530	·01	...	2·86	12·11	·01	·02	·54	3·12	18·67	40·73
44	Gonda ...	1,443,739	·08	..	·20	10·14	·03	·05	·43	1·62	12·55	34·64
45	Bahraich ...	1,038,006	...	...	·26	15·86	·04	·04	·47	4·98	21·65	46·68
46	Sultanpur ...	1,003,912	...	...	·26	17·63	·01	·07	·41	4·44	22·83	51·03
47	Partabgarh ...	855,130	·01	·02	...	16·95	·01	·06	·27	3·99	21·32	45·43
48	Bara Banki ...	1,007,258	·02	...	·83	15·78	...	...	·50	3·34	20·49	46·95
Total of Rural districts		42,372,494	·05	·01	1·66	17·26	·09	·17	·47	2·77	22·48	44·86



## ANNUAL FORM No. VI.

Paragraphs 26, 37 - 40, 43-46 and 49-53.]

Deaths from **different causes** and Births registered in the **Towns** (having a population of 10,000 and upwards) and **districts** (exclusive of such towns) of the United Provinces during the year 1923—(contd.).

1	2	3	4	5			6	7	8	
Number.	Districts.	Towns.	Popula- tion according to census of 1921.	Births.			Birth-rate per 1,000 of population.	Cholera.	Small-pox.	Plague.
				Male.	Female.	Total.				
		<i>B.—Towns.</i>								
1	Dehra Dun	Dehra ...	34,092	535	505	1,040	30.50	1	...	...
2		Mussooree ...	(a)11,882	108	116	224	15.20	...	1	1
3	Saharanpur	Hardwar Union ...	30,795	534	556	1,090	35.39	13	...	...
4		Saharanpur ...	62,261	1,728	1,606	3,334	53.55	6	6	2
5		Deoband ...	17,891	502	482	984	55.00	...	...	...
6		Gangoh ...	11,843	247	218	465	39.26	...	5	1
7		Roorkee ...	12,246	277	258	535	43.69	...	...	...
8	Muzaffar- nagar.	Kairana ...	16,683	341	320	661	39.62	...	...	...
9		Kandhla ...	10,365	228	259	487	46.98	...	...	...
10		Muzaaffarnagar ...	23,937	490	485	975	40.73	...	...	1
11	Meerut	Meerut ...	77,711	1,665	1,544	3,209	41.29	11	6	14
12		Hapur ...	20,388	541	517	1,058	51.89	...	...	16
13		Ghaziabad ...	12,343	290	253	543	43.99	1	1	421
14	Buland- shahr.	Khurja ...	25,719	767	721	1,488	57.86	2	...	1
15		Sikandrabad ...	16,857	524	458	982	58.25	...	67	4
16		Bulandshahr ...	19,509	567	441	1,008	51.67	...	...	6
17		Jahangirabad ...	10,279	211	166	377	36.68	...	...	50
18	Aligarh	Aligarh or Koil ...	66,963	1,705	1,632	3,337	49.83	55	49	1
19		Hathras ...	38,763	1,141	1,040	2,181	56.26	72	3	1
20		Atrauli ...	13,018	391	377	768	58.99	...	...	...
21	Muttra	Muttra ...	48,724	1,265	1,237	2,502	51.35	6	...	...
22		Brindaban ...	14,632	260	237	497	33.97	8	12	...
23	Agra	Agra ...	163,750	4,748	4,700	9,448	57.70	...	36	6
24		Firozabad ...	20,183	450	424	874	43.30	109	10	...
25	Mainpuri	Mainpuri ...	14,352	180	137	317	22.09	...	...	...
26		Shikohabad ...	10,374	148	143	291	28.05	10	...	...
27	Etah	Kasganj ...	20,988	499	445	944	44.98	5	3	1
28		Soron ...	10,175	272	275	547	53.76	...	...	...
29	Bareilly	Bareilly ...	119,175	1,947	1,917	3,864	32.42	8	2	3
30		Aonla ...	13,132	444	413	857	65.26	...	1	...
31	Bijnor	Nagina ...	18,736	619	519	1,138	60.74	1	1	...
32		Najibabad ...	18,504	510	538	1,048	56.64	...	1	...
33		Bijnor ...	18,095	466	425	891	49.24	...	...	...
34		Sherkot ...	13,889	321	275	596	42.91	...	...	...
35		Chandpur ...	11,032	352	362	714	64.72	1	...	...
36	Budaun	Kiratpur ...	14,869	289	238	527	35.44	...	...	...
37		Ujhani ...	11,186	210	189	399	35.67	4	...	...
38		Budaun ...	39,118	1,069	939	2,008	51.33	2	3	...
39		Sahaswan ...	15,972	415	386	801	50.15	...	...	...
40		Moradabad ...	82,671	2,395	2,241	4,636	56.08	4	9	2
41	Moradabad	Sambhal ...	41,585	1,176	1,048	2,224	53.48	2	1	...
42		Amroha ...	40,448	1,179	1,051	2,230	55.13	3	3	...
43		Chandausi ...	25,164	677	649	1,326	52.69	...	...	...
44	Shahjahan- pur.	Tilhar ...	16,534	466	455	921	55.53	...	...	...
45		Shahjahanpur ...	68,782	1,577	1,425	3,002	43.64	17	...	...

(a) Rates calculated on average population 14,735.



Deaths from **different causes** and Births registered in the **Towns**  
such towns) of the United Provinces

1	2	3	4	9	10	11	12			
Number.	Districts.	Towns.	Popula- tion according to census of 1921.	Fevers.	Dysentery and diarrhoea.	Respiratory diseases.	Suicide.		Wounds or acci- dents.	Injuries or Snake-bite killed by wild beasts.
							Male.	Female.		
		<i>B. — Towns —</i> (contd.).								
1	Dehra Dun	Dehra ...	34,092	311	72	195	1	...	31	1
2		Mussooree ...	(a) 11,882	66	8	45	...	...	4	...
3	Saharanpur	Hardwar Union ...	30,795	630	139	61	...	...	11	3
4		Saharanpur ...	62,261	1,590	88	202	...	...	44	...
5		Deoband ...	17,891	470	6	1	...	...	7	2
6		Gangoh ...	11,843	271	6	2	...	...	3	...
7		Roorkee ...	12,246	208	35	23	...	...	1	...
8	Muzaffar- nagar.	Kairana ...	16,683	415	...	1	...	...	2	...
9		Kandhla ...	10,365	311	1	1	...	...	...	...
10		Muzaffarnagar ...	23,937	440	25	19	1	...	9	...
11	Meerut	Meerut ...	77,711	543	238	611	...	...	10	1
12		Hapur ...	20,388	122	119	275	...	...	19	...
13		Ghaziabad ...	12,343	342	8	13	...	...	3	...
14	Buland- shahr.	Khurja ...	25,719	898	83	96	...	...	45	...
15		Sikandrabad ...	16,857	532	27	23	...	...	4	...
16		Bulandshahr ...	19,509	586	13	28	...	...	19	3
17		Jahangirabad ...	10,279	181	2	1	...	...	...	...
18	Aligarh	Aligarh or Koil ...	66,963	1,254	138	187	...	...	30	...
19		Hathras ...	38,763	432	441	243	...	1	34	...
20		Atrauli ...	13,018	208	105	3	...	...	6	...
21	Muttra	Muttra ...	48,724	782	180	524	2	...	26	1
22		Brindaban ...	14,632	572	62	63	...	...	11	2
23	Agra	Agra ...	163,750	2,653	269	1,711	2	2	170	4
24		Firozabad ...	20,183	290	55	78	1	1	13	...
25	Mainpuri	Mainpuri ...	14,352	195	...	1	...	...	...	...
26		Shikohabad ...	10,374	111	...	5	...	...	3	1
27	Etah	Kasganj ...	20,988	334	54	17	...	...	...	...
28		Soron ...	10,175	208	69	36	...	1	2	...
29	Bareilly	Baroilly ...	119,175	914	38	529	...	...	23	...
30		Aonla ...	13,132	175	60	44	...	1	16	1
31	Bijnor	Nagina ...	18,736	298	47	55	...	1	8	6
32		Najibabad ...	18,504	344	36	59	1	1	3	4
33		Bijnor ...	18,095	251	44	10	2	...	20	2
34		Sherkot ...	13,889	227	...	...	...	...	2	3
35		Chandpur ...	11,032	164	2	14	...	1	2	...
36		Kiratpur ...	14,869	154	...	...	...	...	2	4
37	Budaun	Ujhani ...	11,186	208	7	4	...	1	5	1
38		Budaun ...	39,118	928	54	87	1	...	24	...
39		Sahaswan ...	15,972	338	28	13	...	...	4	3
40	Moradabad	Moradabad ...	82,671	1,263	203	773	3	...	84	2
41		Sambhal ...	41,585	978	86	58	...	...	14	1
42		Amroha ...	40,448	731	107	97	2	...	20	1
43		Chandausi ...	25,164	385	118	139	...	1	30	...
44	Shahjahan- pur.	Tilhar ...	16,584	308	18	46	...	1	14	2
45		Shahjahanpur ...	68,732	706	151	656	...	...	14	1

(a) Rates calculated on average population 14,735.



## FORM No. VI.

(having a population of 10,000 and upwards) and **districts** (exclusive of during the years 1923—(continued).

		13	14	15												
		Ratio of deaths per 1,000 of population.														
Ra- bies.	Total.	All other causes.	Total deaths from all causes.	Cho- lera.	Small- pox.	Plague.	Fevers.	Dysentery and diarrhoea.	Respiratory dise- ases.	Injuries.	All other causes.	From all causes.		Number.		
												For the year.	Mean ratio of previous five years.			
1	34	271	884	·03	...	...	9·12	2·11	5·72	1·00	7·95	25·93	38·69	1		
2	6	72	199	...	·07	·07	4·48	·54	3·05	·41	4·88	13·50	(c)	2		
...	14	295	1,152	·42	...	...	20·46	4·51	1·98	·45	9·58	37·41	44·88	3		
...	44	751	2,689	·10	·10	·03	25·54	1·41	3·24	·71	12·06	43·19	53·13	4		
...	9	83	569	...	...	...	26·27	·33	·05	·50	4·64	31·80	52·71	5		
...	3	19	307	...	·42	·08	22·88	·51	·17	·25	1·60	25·92	17·93	6		
...	1	66	433	...	...	...	25·15	2·86	1·88	·08	5·39	35·36	46·00	7		
...	2	9	427	...	...	...	24·37	...	·06	·12	·54	25·59	27·05	8		
...	...	5	318	...	...	...	30·00	·10	·10	...	·48	30·68	(c)	9		
...	10	82	577	...	...	·04	18·38	1·04	·79	·42	3·42	24·10	38·48	10		
...	11	656	2,090	·14	·08	·18	6·99	3·06	7·86	·14	8·44	26·89	36·78	11		
...	19	218	769	...	...	·78	5·98	5·84	13·49	·93	10·69	37·72	47·59	12		
...	3	49	838	·08	·08	34·11	27·71	·65	1·05	·24	3·97	67·89	38·82	13		
1	46	154	1,280	·08	...	·04	34·91	3·23	3·73	1·79	5·99	49·77	52·36	14		
...	4	38	695	...	3·97	·24	31·56	1·60	1·36	·24	2·25	41·23	47·98	15		
...	22	23	678	...	...	·31	30·04	·66	1·43	1·13	1·18	34·75	43·29	16		
...	...	...	234	...	...	4·86	17·61	·19	·10	...	...	22·76	23·30	17		
...	30	820	2,534	·82	·73	·01	18·73	2·06	2·79	·45	12·24	37·84	54·23	18		
2	37	479	1,708	1·86	·08	·02	11·14	11·38	6·27	·95	12·36	44·06	61·19	19		
...	6	94	416	...	...	...	15·98	8·06	·23	·46	7·22	31·95	53·16	20		
...	29	473	1,993	·12	...	...	16·05	3·69	10·75	·59	9·69	40·90	63·24	21		
1	14	84	815	·55	·82	...	39·09	4·24	4·30	·96	5·74	55·70	72·06	22		
...	178	1,403	6,256	...	·22	·03	16·20	1·64	10·45	1·09	8·57	38·20	60·79	23		
...	15	193	750	5·40	·49	...	14·37	2·72	3·86	·74	9·56	37·16	68·70	24		
...	...	10	206	...	...	...	13·59	...	·07	...	·69	14·35	29·10	25		
...	4	10	140	·96	...	...	10·70	...	·48	·38	·96	13·49	29·47	26		
...	...	104	518	·24	·14	·05	15·91	2·57	·81	...	4·95	24·68	48·15	27		
...	5	95	411	...	...	...	20·44	6·78	3·54	·29	9·34	40·39	65·99	28		
...	23	546	2,063	·07	·02	·02	7·67	·32	4·44	·19	4·58	17·31	30·91	29		
...	18	185	483	...	·07	...	13·33	4·57	3·35	1·37	14·09	36·78	51·98	30		
...	15	108	525	·05	·05	..	15·90	2·51	2·93	·80	5·76	28·02	63·01	31		
...	9	156	605	...	·05	...	18·59	1·94	3·19	·49	8·43	32·69	56·75	32		
...	24	135	464	...	...	...	13·87	2·43	·55	1·33	7·46	25·64	48·83	33		
...	5	41	273	...	...	...	16·34	...	...	·36	2·95	19·65	44·26	34		
...	3	143	327	·09	...	...	4·86	·18	1·27	·27	12·96	29·64	57·91	35		
...	6	38	198	...	...	...	10·36	..	...	·40	2·55	13·32	21·08	36		
...	7	45	275	·36	...	...	18·59	·62	·36	·62	4·02	24·58	(c)	37		
...	25	291	1,399	·05	·08	...	23·72	1·38	2·22	·64	7·44	35·53	55·46	38		
4	11	133	523	...	...	...	21·16	1·75	·81	·69	8·33	32·74	59·06	39		
3	92	440	2,736	·05	·11	·02	15·28	2·45	9·35	1·11	5·32	33·70	54·13	40		
3	18	155	1,298	·05	·02	...	23·52	2·07	1·39	·43	3·73	31·21	48·02	41		
...	23	353	1,317	·07	·07	...	18·07	2·64	2·40	·57	8·73	32·56	54·83	42		
1	32	243	917	...	...	...	15·30	4·69	5·52	1·27	9·66	36·44	57·60	43		
...	17	220	609	...	...	...	18·57	1·08	2·77	1·02	13·26	36·72	55·97	44		
...	15	430	1,975	·25	...	...	10·26	2·19	9·54	·22	6·25	28·71	37·88	45		

(c) Population increased in census 1921.



Paragraphs 26, 37—40, 43—46 and 49—53.]

**ANNUAL**

*Deaths from **different causes** and Births registered in the **Towns**  
such towns) of the United Provinces during*

1	2	3	4	5			6	7	8	
Number.	Districts.	Towns.	Population according to census of 1921.	Births.			Birth-rate per 1,000 of population.	Cholera.	Small-pox.	Plague.
				Male.	Female.	Total.				
		<i>B.—Towns— (contd.).</i>								
46	Pilibhit ...	Pilibhit ...	32,344	973	935	1,908	58·99	1	...	...
47	Farrukhabad {	Farrukhabad- cum-Fateh- garh.	48,331	1,251	1,063	2,314	47·88	...	2	1
48		Kanauj ...	18,258	301	257	558	30·56	...	...	...
49	Etawah ...	Etawah ...	41,558	1,120	1,119	2,239	53·83	2	1	1
50	Cawnpore ...	Cawnpore ...	195,085	4,122	3,651	7,773	39·84	5	...	76
51	Fatehpur ...	Fatehpur ...	14,948	243	252	495	33·11	...	...	...
52	Allahabad ...	Allahabad ...	145,605	3,408	3,114	6,522	44·79	11	163	4
53	Jhansi {	Jhansi ...	54,385	1,319	1,209	2,528	46·48	...	...	...
54		Mau ...	12,554	322	340	662	52·73	...	...	...
55	Jalaun {	Lalitpur ...	11,504	296	283	579	50·33	...	...	...
56		Kalpi ...	10,037	259	233	492	49·02	...	...	...
57	Hamirpur {	Konch ...	14,503	410	344	754	51·99	...	...	...
58		Mahoba ...	11,648	265	257	522	44·81	...	...	...
59	Banda ...	Banda ...	20,029	358	260	618	30·85	...	7	397
60	Benares ...	Benares ...	195,373	4,861	4,834	9,695	49·62	...	3	85
61	Mirzapur ...	Mirzapur Bin- dhachal.	54,994	1,404	1,175	2,579	46·90	1	9	...
62	Jaunpur ...	Jaunpur ...	32,569	628	509	1,137	34·91	6	2	16
63	Ghazipur ...	Ghazipur ...	24,708	347	349	696	28·17	18	...	18
64	Ballia ...	Ballia ...	18,215	237	228	465	27·17	62	...	193
65	Gorakhpur... {	Gaura Barhaj	12,497	240	247	487	38·97	...	1	140
66		Gorakhpur...	50,498	1,186	1,112	2,298	45·51	36	4	51
67	Basti ...	Basti ...	17,691	111	73	184	10·40	1	...	243
68	Azamgarh {	Mubarakpur	12,500	216	181	397	31·76	1	...	319
69		Azamgarh ...	14,788	247	190	437	29·55	1	1	177
70	Naini Tal {	Mau ...	17,998	200	206	406	22·56	2	1	526
71		Naini Tal ...	(b) 10,392	180	155	335	24·90	...	1	...
72	Lucknow {	Kashipur ...	10,576	293	264	557	52·67	4	...	...
73		Lucknow ...	217,167	5,279	4,943	10,222	47·07	4	11	4
74	Unao ...	Unao ...	11,147	237	234	501	44·94	1	...	...
75	Rae Bareli ...	Rae Bareli ...	16,183	369	373	742	45·85	...	41	...
76	Sitapur {	Khairabad ...	11,522	306	275	581	50·42	...	...	66
77		Laharpur ...	11,185	265	247	512	45·77	...	...	2
78	Hardoi {	Sitapur ...	18,432	436	473	939	50·94	...	1	1
79		Shahabad ...	18,696	492	380	872	46·64	5	...	...
80	Kheri {	Sandila ...	14,074	418	395	813	57·77	1	7	...
81		Hardoi ...	14,412	235	238	473	32·82	1	...	1
82	Fyzabad {	Lakhimpur...	12,396	72	44	116	9·36	...	...	1
83		Fyzabad- Ajodhya.	51,342	852	771	1,623	31·61	4	1	532
84	Gonda {	Tanda ...	18,058	460	436	896	49·62	5	...	283
85		Gonda ...	13,228	239	196	435	32·88	2	...	1
86	Bahraich {	Balrampur ...	16,131	420	317	737	45·69	...	...	...
87		Bahraich ...	27,371	476	396	872	31·86	...	...	...
88	Bara Banki .. {	Nawabganj...	12,369	214	187	401	32·42	...	...	...
89		Rudauli ...	10,327	270	272	542	52·48	...	...	1
Total of Towns			30,03,293	70,653	65,639	1,36,292	45·38	515	476	3,670
Total of rural districts.			42,372,494	7,93,501	705,657	1,499,158	35·38	2,076	271	70,517
Total for the Province.			45,375,787	864,154	771,296	1,635,450	36·04	2,591	747	74,187

(b) Rates calculated on average population 13,454.



## FORM No. VI.

(having a population of 10,000 and upwards) and **districts** (exclusive of the year 1923—(continued).

9	10	11	12						13	14	15			
Fevers.	Dy- sen- tery and diarr- hoea.	Res- pira- tory dis- eases.	Injuries.						All other causes.	Total deaths from all causes.	Ratio of deaths per 1,000 of population.			Number.
			Suicide.		Wounds or acci- dents.	Snakebite or killed by wild beasts.	Rabies.	Total.			Cholera.	Small-pox.	Plague.	
			Male.	Female.										
547	66	388	...	...	10	2	5	17	174	1,193	·03	...	...	46
524	173	646	1	3	33	2	1	40	636	2,022	...	·04	·02	47
248	22	24	...	...	...	...	...	...	120	414	...	...	...	48
680	137	313	3	2	18	1	3	27	676	1,837	·05	·02	·02	49
3,446	457	2,483	...	...	121	4	...	125	3,110	9,702	·02	...	·39	50
248	2	3	...	...	...	...	3	3	9	265	...	...	...	51
1,649	283	1,211	...	...	35	2	2	39	1,736	5,096	·07	1·12	·03	52
1,229	83	94	2	...	27	2	1	32	366	1,804	...	...	...	53
326	50	159	...	...	19	...	1	20	129	684	...	...	...	54
246	37	49	1	...	8	...	...	9	78	419	...	...	...	55
195	16	119	...	...	7	5	...	12	63	405	...	...	...	56
340	16	193	1	...	8	3	...	12	7	568	...	...	...	57
159	14	206	...	1	...	1	...	2	52	433	...	...	...	58
506	25	49	3	2	12	...	1	18	184	1 186	...	·35	19·82	59
5,110	840	2,009	1	1	144	3	2	151	2,319	10,517	...	·01	·43	60
1,034	67	72	..	...	30	3	1	34	332	1,549	·02	·16	...	61
471	91	78	...	...	28	11	1	40	185	889	·18	·06	·49	62
276	27	42	...	...	13	3	...	16	58	455	·73	...	·73	63
148	33	11	...	...	6	3	...	9	83	539	3·40	...	10·59	64
170	2	7	...	...	6	5	...	11	17	348	...	·08	11·20	65
654	71	161	...	...	39	7	...	46	482	1,505	·71	·08	1·01	66
87	...	...	...	...	3	...	...	3	21	355	·06	...	13·73	67
90	28	8	...	...	5	4	...	9	75	530	·08	...	25·52	68
147	30	28	...	...	8	...	...	8	60	452	·07	·07	11·97	69
94	45	38	...	...	2	1	...	3	69	778	·11	·05	29·22	70
47	26	148	3	1	5	...	...	9	54	285	...	·07	...	71
95	54	69	...	...	5	3	...	8	58	288	·38	...	...	72
2,173	556	2,527	5	2	184	9	...	200	3,229	8,704	·02	·05	·02	73
218	16	39	...	...	8	...	...	8	92	374	·09	...	...	74
319	38	18	...	...	9	...	...	9	183	608	...	2·53	...	75
201	29	19	...	...	6	2	...	8	104	427	...	...	5·73	76
207	...	...	...	...	3	2	...	5	42	256	...	...	·18	77
299	77	35	...	1	11	...	1	13	288	714	...	·05	·05	78
252	10	16	...	...	7	2	...	9	113	405	·27	...	...	79
324	87	28	...	1	19	...	2	22	180	599	·07	·50	...	80
211	6	12	...	...	8	...	...	8	70	309	·07	...	·07	81
82	2	...	...	...	1	...	...	1	...	86	...	...	·08	82
685	133	318	...	...	32	4	1	37	363	2,073	·08	·02	10·36	83
301	37	41	...	...	7	2	1	10	166	837	·28	...	15·67	84
211	2	...	...	...	...	...	...	...	32	248	·15	...	·07	85
393	...	5	...	...	7	1	...	8	61	467	...	...	...	86
411	14	19	...	...	8	4	...	12	75	531	...	...	...	87
160	16	20	...	...	3	...	...	3	78	277	...	...	...	88
220	26	26	...	..	3	1	...	4	87	364	...	...	·10	89
48,860	6,936	18,780	36	26	1,700	141	44	1,947	26,527	1,07,711	·17	·16	1·22	
731,189	3,942	7,328	483	1,376	12,454	5,369	170	19,852	117,418	952,593	·05	·01	1·66	
780,049	10,878	26,108	519	1,402	14,154	5,510	214	21,799	143,945	1,060,304	·06	·02	1·63	



Faragraphs 26, 37—40, 43—46 and 49—53.]

## ANNUAL FORM No. VI.

Deaths from **different causes** and Births regis red in the **Towns**  
(having a population of 10,000 and upwards) and **teistricts** (exclusive  
of such towns) of the United Provinces during the year 1923—(concluded).

1 Number.	2 Districts.	3 Towns.	4 Popula- tion according to census of 1921.	15 Ratio of deaths per 1,000 of population.						
				Fevers.	Dysentery and diarrhoea.	Respiratory dis- eases.	Injuries.	All other causes.	From all causes.	
									For the year.	Mean ratio of previ- ous five years.
		<i>B — Towns — (concl'd.).</i>								
46	Pilibhit ...	Pilibhit ...	32,344	16·91	2·04	12·00	·52	5·38	36·82	58·09
47	Farrukhabad {	Farrukhabad- cum-Fateh- garh.	48,331	10·84	3·58	13·37	·83	13·16	41·84	57·16
48		Kanauj ...	18,258	13·58	1·20	1·31	...	6·57	22·67	32·61
49	Etawah ...	Etawah ...	41,558	16·36	3·30	7·53	·65	16·27	44·20	62·64
50	Cawnpore ...	Cawnpore ...	195,085	17·66	2·34	12·73	·64	15·94	49·73	63·37
51	Fatehpur ...	Fatehpur ...	14,948	16·59	·13	·20	·20	·60	17·73	36·55
52	Allahabad ...	Allahabad .	145,605	11·32	1·94	8·32	·27	11·92	35·00	45·58
53		Jhansi ...	54,385	22·60	1·52	1·73	·59	6·73	33·17	44·88
54	Jhansi ... {	Mau ...	12,554	25·97	3·98	12·66	1·59	10·27	54·48	59·29
55		Lalitpur ...	11,504	21·38	3·22	4·26	·78	6·78	36·42	40·24
56	Jalaun ... {	Kalpi ...	10,037	19·43	1·59	11·86	1·19	6·28	40·33	59·11
57		Konch ...	14,503	23·44	1·10	13·31	·83	·48	39·16	50·76
58	Hamirpur ...	Mahoba ...	11,648	13·65	1·20	17·68	·17	4·46	37·17	49·23
59	Banda ...	Banda ...	20,029	25·26	1·25	2·44	·90	9·19	59·21	48·54
60	Benares ...	Benares ..	195,373	26·15	4·30	10·28	·77	11·87	53·83	62·70
61	Mirzapur ...	Mirzapur-Bin- dhachal.	54,994	18·80	1·22	1·31	·62	6·04	28·17	37·92
62	Jaunpur ...	Jaunpur ...	32,569	14·46	2·79	2·39	1·23	5·68	27·29	42·27
63	Ghazipur ...	Ghazipur ...	24,708	11·17	1·09	1·70	·05	2·34	18·41	25·02
64	Ballia ...	Ballia ...	18,215	8·12	1·81	·60	·49	4·56	29·59	22·58
65	Gorakhpur ... {	Gaura Barhaj	12,497	13·60	·16	·56	·88	1·36	27·85	25·49
66		Gorakhpur ...	50,498	12·95	1·40	3·19	·91	9·54	29·80	39·53
67	Basti ...	Basti ...	17,691	4·92	...	...	·17	1·19	20·07	(c)
68		Mubarakpur	12,500	7·20	2·24	·64	·72	6·00	42·40	39·94
69	Azamgarh ... {	Azamgarh ...	14,788	9·94	2·03	1·89	·54	4·05	30·56	31·73
70		Mau ...	17,998	5·22	2·50	2·11	·17	3·83	43·23	36·29
71	Naini Tal ... {	Naini Tal ...	(b) 10,392	3·49	1·93	11·00	·67	4·01	21·18	(c)
72		Kashipur ...	10,576	8·98	5·10	6·52	·76	5·48	27·23	40·86
73	Lucknow ...	Lucknow ...	217,167	10·00	2·56	11·64	·92	14·87	40·08	48·62
74	Unao ...	Unao ...	11,147	19·56	1·43	3·50	·72	8·25	33·55	52·54
75	Rae Bareli ...	Rae Bareli ...	16,183	19·71	2·35	1·11	·56	11·31	37·57	51·67
76		Khairabad ...	11,522	17·44	2·52	1·65	·69	9·03	37·06	48·79
77	Sitapur ... {	Laharpur ...	11,185	18·51	...	...	·45	3·75	22·89	30·88
78		Sitapur ..	18,432	16·22	4·18	1·90	·70	15·62	38·74	52·59
79		Shahabad ...	18,696	13·48	·53	·85	·48	6·04	21·66	44·68
80	Hardoi ... {	Sandila ...	14,074	23·02	2·63	1·99	1·56	12·79	42·56	56·12
81		Hardoi ...	14,412	14·64	·42	·83	·55	4·86	21·44	40·59
82	Kheri ...	Lakhimpur	12,396	6·61	·16	...	·08	...	6·94	16·13
83	Fyzabad ... {	Fyzabad-	51,342	13·34	2·59	6·19	·72	7·07	40·38	40·49
84		Ajodhya.								
84		Tanda ...	18,058	16·67	2·05	2·27	·55	8·83	46·35	56·30
85	Gonda ... {	Gonda ...	13,228	15·95	·15	...	...	2·42	18·75	40·80
86		Balrampur ..	16,131	24·36	...	·31	·49	3·78	28·95	54·41
87	Bahraich ...	Bahraich ...	27,371	15·01	·51	·69	·44	2·74	19·40	30·64
88	Bara Banki... {	Nawabganj	12,369	12·93	1·29	1·62	·24	6·31	22·39	32·16
89		Rudauli ..	10,327	21·30	2·52	2·52	·39	8·42	35·25	(c).
		Total of Towns	3,003,293	16·27	2·31	6·25	·65	8·83	35·86	49·07
		Total of rural districts.	42,372,494	17·26	·09	·17	·47	2·77	22·48	44·86
		Total for the Province.	45,375,787	17·19	·24	·57	·48	3·17	23·37	45·17

(b) Rates calculated on average population 13,454.

(c) Populations increased in census 1921.



Paragraphs 23, 47 and 54.1

## SUPPLEMENTARY ANNUAL FORM NO. VI(a).

Deaths registered from **Certain Causes** in the **Towns** (having a population of 10,000 and upwards) and **Districts** (exclusive of such towns) of the United Provinces, during the year 1923.

1	2	3	4		5		6	
Number.	Districts and Towns.	Popula- tion according to census of 1921.	Malaria.		Enteric fever.		Measles.	
			Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.
A. - Rural Districts.								
MEERUT DIVISION.								
1	Dehra Dun ... ..	166,269	2,052	12·34	2	·01	4	·02
2	Saharanpur ... ..	802,435	18,266	22·76	6	·01	15	·02
3	Muzaffarnagar ... ..	743,280	12,378	16·65	16	·02	30	·04
4	Meerut ... ..	1,388,632	28,378	20·43	23	·02	63	·04
5	Bulandshahr ... ..	994,155	28,021	28·18	1	...	90	·09
AGRA DIVISION.								
6	Aligarh ... ..	943,001	18,130	19·22	14	·01	22	·02
7	Muttra ... ..	555,782	7,611	13·70	66	·12	16	·03
8	Agra ... ..	740,222	11,135	15·04	80	·11	85	·11
9	Mainpuri ... ..	723,301	12,713	17·58	...	...	15	·02
10	Etah ... ..	798,597	12,310	15·41	64	·08	28	·04
ROHILKHAND DIVISION.								
11	Bareilly ... ..	881,568	18,387	20·86	311	·35	15	·02
12	Bijnor ... ..	645,057	12,078	18·71	11	·02	2	...
13	Budaun ... ..	909,071	19,803	21·78	1	...	9	·01
14	Moradabad ... ..	1,008,785	21,431	21·24	24	·02	51	·05
15	Shahjahanpur ... ..	753,749	14,857	19·71	112	·15	...	...
16	Pilibhit ... ..	399,257	8,209	20·57	31	·08	48	·12
ALLAHABAD DIVISION.								
17	Farrukhabad ... ..	790,044	18,376	23·26	19	·02	3	...
18	Etawah ... ..	691,974	10,185	14·72	70	·10	...	...
19	Cawnpore ... ..	953,579	14,531	15·23	61	·06	24	·02
20	Fatehpur ... ..	637,444	8,381	13·15	12	·02	1	...
21	Allahabad ... ..	1,258,840	13,581	10·79	3,322	2·64	137	·11
JHANSI DIVISION.								
22	Jhansi ... ..	528,056	12,233	23·17	872	1·65	41	·08
23	Jalaun ... ..	380,899	3,336	8·76	1,950	5·12	8	·02
24	Hamirpur ... ..	428,597	5,549	12·94	20	·04	58	·13
25	Banda ... ..	593,085	10,210	17·21	4	·01	16	·03
BENARES DIVISION.								
26	Benares ... ..	705,939	9,708	13·75	1,998	1·98	30	·04
27	Mirzapur ... ..	669,189	13,957	20·86	1	...	76	·11
28	Jaunpur ... ..	1,122,536	14,874	13·25	470	·42	21	·02
29	Ghazipur ... ..	807,581	13,499	16·71	2	...	16	·02
30	Ballia ... ..	812,794	7,704	9·48	544	·67	5	·01
GORAKHPUR DIVISION.								
31	Gorakhpur ... ..	3,203,835	23,704	7·40	1,409	·44	138	·04
32	Basti ... ..	1,907,537	25,086	13·15	425	·22	92	·05
33	Azamgarh ... ..	1,483,371	22,636	15·26	449	·30	16	·01
KUMAUN DIVISION.								
34	Naini Tal ... ..	255,907	6,996	27·34	22	·08	4	·01
35	Almora ... ..	530,338	9,143	17·23	2	...	114	·21
36	Garhwal ... ..	485,186	8,215	16·93	117	·23	14	·03
LUCKNOW DIVISION.								
37	Lucknow ... ..	507,177	4,439	8·75	55	·11	32	·06
38	Unao ... ..	807,931	9,112	11·28	...	...	19	·02
39	Rae Bareilly ... ..	920,220	8,244	8·96	2	...	54	·06
40	Sitapur ... ..	1,048,342	15,184	14·48	274	·26	32	·03
41	Hardoi ... ..	1,037,223	15,917	15·34	...	...	17	·02
42	Kheri ... ..	901,079	15,955	17·71	...	...	17	·02
FYZABAD DIVISION.								
43	Fyzabad ... ..	1,102,530	6,601	5·98	65	·06	30	·03
44	Gonda ... ..	1,443,739	14,531	10·06	21	·01	82	·06
45	Bahraich ... ..	1,038,006	15,874	15·30	10	·01	578	·56
46	Sultanpur ... ..	1,003,912	12,471	12·42	2	...	190	·19
47	Partabgarh ... ..	855,130	14,121	16·51	8	·01	174	·20
48	Bara Banki ... ..	1,007,258	13,007	12·91	...	...	153	·15
TOTAL OF RURAL DISTRICTS ...		42,372,494	643,119	15·18	12,366	·29	2,685	·06



Paragraphs 23, 47 and 54.]

SUPPLEMENTARY

Deaths registered from **Certain Causes** in the **Towns** (having  
of the United Provinces)

1	2	3	7		8		9		10	
Number.	Districts and towns.	Popula- tion according to census of 1921.	Relapsing fever.		Kala Azar.		Other fevers.		Dysentery.	
			Deaths	Ratio.	Deaths	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.
A.—Rural Districts— (concluded).										
MEERUT DIVISION.										
1	Dehra Dun ...	166,269	7	·04	...	...	489	2·94	44	·26
2	Saharanpur ...	802,435	...	...	19	·02	924	1·15	8	·01
3	Muzaffarnagar ...	743,280	8	·01	...	...	2	...	1	...
4	Meerut ...	1,388,632	1	...	...	...	689	·50	23	·02
5	Bulandshahr ...	994,155	...	...	...	...	88	·09	11	·01
AGRA DIVISION.										
6	Aligarh ...	943,001	...	...	...	...	774	·82	8	·01
7	Muttra ...	555,782	...	...	...	...	445	·80	3	...
8	Agra ...	740,222	44	·06	...	...	2,206	2·98	10	·01
9	Mainpuri ...	723,301	...	...	3	...	106	·15	...	...
10	Etah ...	798,597	8	·01	1	...	75	·09	16	·02
ROHILKHAND DIVI- SION.										
11	Bareilly ...	881,568	1	...	5	...	34	·04	23	·03
12	Bijnor ...	645,057	...	...	...	...	40	·06	10	·01
13	Budaun ...	909,071	...	...	...	...	11	·01	3	...
14	Moradabad ...	1,008,785	...	...	1	...	1,830	1·81	5	...
15	Shahjahanpur ...	753,749	...	...	2	...	905	1·20	...	...
16	Pilibhit ...	399,257	16	·04	18	·04	19	·05	5	·01
ALLAHABAD DIVISION.										
17	Farrukhabad ...	790,044	...	...	...	...	1,252	1·58	2	...
18	Etawah ..	691,974	...	...	...	...	1,660	2·40	1	...
19	Cawnpore ...	953,579	...	...	...	...	1,630	1·71	20	·02
20	Fatehpur ...	637,444	2	...	...	...	11	·02	2	...
21	Allahabad ...	1,258,840	...	...	...	...	3,128	2·49	7	...
JHANSI DIVISION.										
22	Jhansi ...	528,056	...	...	...	...	1,661	3·14	28	·05
23	Jalaun ...	380,899	...	...	...	...	2,089	5·48	6	·01
24	Hamirpur ...	428,597	...	...	...	...	6,303	14·71	7	·02
25	Banda ...	593,085	...	...	...	...	2,089	3·52	12	·02
BENARES DIVISION.										
26	Benares ...	705,939	...	...	1	...	913	1·29	10	·01
27	Mirzapur...	669,189	...	...	...	...	239	·36	3	...
28	Jaunpur ...	1,122,536	...	...	...	...	194	·17	7	...
29	Ghazipur ...	807,581	...	...	...	...	...	...	...	...
30	Ballia ...	812,794	...	...	...	...	2,556	3·14	238	·29
GORAKHPUR DIVISION.										
31	Gorakhpur ...	3,203,835	2	...	8	...	11,472	3·58	48	·01
32	Basti ...	1,907,537	...	...	...	...	1,794	·94	20	·01
33	Azamgarh ...	1,483,371	...	...	...	...	6	...	64	·04
KUMAUN DIVISION.										
34	Naini Tal ...	255,907	8	·03	1	...	110	·43	46	·18
35	Almora ...	530,338	84	·16	...	...	2,413	4·56	410	·77
36	Garhwal ...	485,186	28	·06	...	...	496	1·02	1,503	3·10
LUCKNOW DIVISION.										
37	Lucknow ...	507,177	15	·02	4	...	2,190	4·32	27	·05
38	Unao ...	807,981	...	...	...	...	3,363	4·16	5	·01
39	Rae Bareli ...	920,220	...	...	...	...	1,981	2·15	8	·01
40	Sitapur ...	1,048,342	...	...	...	...	1,802	1·72	13	·01
41	Hardoi ...	1,037,228	...	...	...	...	112	·11	6	...
42	Kheri ...	901,079	...	...	...	...	4	...	3	...
FYZABAD DIVISION.										
43	Fyzabad ...	1,102,530	...	...	...	...	6,653	6·03	6	...
44	Gonda ...	1,443,739	...	...	...	...	2	...	15	·01
45	Babraich ...	1,038,006	...	...	...	...	2	...	18	·02
46	Sultanpur ...	1,003,912	1	...	...	...	5,037	5·02	3	...
47	Partabgarh ...	855,130	...	...	...	...	192	·22	10	·01
48	Bara Banki ...	1,007,258	...	...	...	...	2,740	2·72	2	...
TOTAL OF RURAL DIS- TRICTS.		42,372,494	225	...	63	...	72,731	1·72	2,720	·06



## ANNUAL FORM No. VI (a).

Population of 10,000 and upwards) and **Districts** (exclusive of such towns)  
during the year 1923—(continued).

11		12		13		14		15	16			17	18
Diarrhoea.		Pneumon- ia.		Phthisis.		Other respir- atory diseases.		Deaths from child birth. *	Deaths under one year.			Infant Mortali- ty rate.	Number.
Deaths.	Ratio.	Deaths	Ratio	Deaths.	Ratio.	Deaths	Ratio.		Male.	Female.	Total.		
71	·43	30	·18	10	·06	109	·65	10	406	334	740	171·45	1
29	·04	5	·01	6	·01	45	·06	12	3,493	3,354	6,847	194·68	2
3	...	...	...	2	...	7	·01	12	2,054	1,743	3,797	125·37	3
28	·02	...	...	46	·03	246	·18	43	5,465	4,081	10,146	172·36	4
12	·01	...	...	2	...	18	·02	11	4,223	3,915	8,138	176·05	5
47	·05	5	...	2	...	43	·04	26	3,270	2,656	5,926	150·12	6
8	·01	2	...	...	...	...	...	10	995	799	1,794	100·85	7
21	·02	3	...	2	...	43	·06	15	2,609	2,257	4,866	163·02	8
3	...	...	...	...	...	17	·02	3	1,710	1,461	3,171	144·09	9
73	·09	...	...	7	·01	113	·14	21	1,809	1,503	3,312	136·70	10
52	·06	14	·01	9	·01	51	·06	9	4,029	3,492	7,521	191·93	11
38	·06	1	...	4	...	23	·04	13	2,702	2,392	5,094	161·16	12
32	·03	...	...	1	...	32	·03	6	3,233	2,897	6,130	170·94	13
28	·02	...	...	3	...	34	·03	6	4,153	3,643	7,801	167·20	14
5	·01	...	...	...	...	20	·03	1	3,009	3,260	6,869	205·55	15
7	·02	...	...	...	...	18	·04	4	1,835	1,615	3,480	188·15	16
23	·03	6	...	11	·01	35	·04	12	3,481	3,106	6,587	218·04	17
2	...	...	...	1	...	7	·01	4	2,169	1,857	4,026	172·04	18
8	·01	...	...	49	·05	69	·07	8	2,492	1,909	4,401	151·05	19
1	...	...	...	...	...	12	·02	1	1,604	1,408	3,012	150·96	20
7	...	...	...	4	...	65	·05	8	4,060	3,144	7,204	191·53	21
42	·08	1	...	10	·02	166	·31	7	2,644	2,375	5,019	210·02	22
16	·04	...	...	1	...	16	·04	3	1,194	956	2,150	163·81	23
32	·07	64	·15	2	...	3,970	9·26	14	2,491	2,036	4,527	258·12	24
7	·01	...	...	...	...	62	·10	3	1,886	1,588	3,474	181·00	25
14	·02	31	·04	9	·01	24	·03	3	2,286	1,801	4,087	180·15	26
26	·04	4	...	4	...	32	·05	10	2,474	1,934	4,408	184·60	27
1	...	...	...	...	...	12	·01	2	2,828	2,048	4,876	154·63	28
11	·01	...	...	...	...	10	·01	2	1,647	1,285	2,932	137·96	29
5	...	...	...	...	...	29	·03	...	1,825	1,339	3,164	130·11	30
5	...	...	...	6	...	207	·06	8	5,969	4,409	10,378	105·71	31
2	...	...	...	...	...	10	...	4	5,832	4,979	10,811	161·88	32
7	...	...	...	1	...	72	·05	23	3,599	2,837	6,436	145·43	33
14	·05	4	·01	6	·02	84	·33	14	813	764	1,577	225·06	34
41	·64	16	·03	40	·07	459	·86	20	1,312	1,281	2,593	121·13	35
84	·17	24	·05	11	·02	247	·51	24	1,271	1,202	2,473	127·15	36
20	·04	3	...	24	·05	81	·14	4	1,432	1,221	2,653	147·06	37
3	...	...	...	...	...	6	·01	...	1,964	1,570	3,534	149·99	38
1	...	...	...	1	...	10	·01	2	1,481	1,184	2,665	110·99	39
8	...	1	...	1	...	33	·03	2	3,443	3,045	6,488	153·78	40
30	·03	...	...	2	...	33	·03	2	3,026	2,493	5,522	151·12	41
1	...	...	...	1	...	8	·01	2	3,082	2,585	5,667	153·91	42
3	...	1	...	5	...	14	·01	5	2,670	2,188	4,858	135·52	43
23	·02	...	...	6	...	66	·05	15	2,610	2,287	4,897	133·13	44
26	·02	1	...	2	...	38	·04	3	3,567	3,015	6,582	180·56	45
4	...	...	...	3	...	70	·07	2	3,865	3,213	7,078	185·96	46
2	...	...	...	2	...	48	·06	1	2,834	2,464	5,298	192·86	47
1	...	...	...	...	...	2	...	...	3,345	2,641	5,986	154·99	48
22	·03	216	...	296	·01	6,816	·16	410	130,826	110,199	241,025	160·77	

\* Note.—By the term "deaths from child birth" is meant "deaths during or within 14 days labour."



Paragraphs 23, 47 and 54.]

SUPPLEMENTARY

Deaths registered from **Certain Causes** in the **Towns** (having a population of 10,000 or more) of the United Province.

Number.	Districts.	Towns.	Popula- tion according to census of 1921.	Malaria.		Enteric fever.		Measles.	
				Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.
		<i>B.—Towns</i>							
1	Dehra Dun	Dehra ...	34,092	75	2·20	40	1·17	8	·23
2		Mussooree ...	(a) 11,882	16	1·08	7	·48	...	...
3	Saharanpur	Hardwar Union	30,793	...	...	...	...	9	·29
4		Saharanpur ...	62,261	...	...	...	...	3	·05
5		Dooband ...	17,891	...	...	...	...	...	...
6		Gangoh ...	11,843	1	·08	...	...	8	·67
7		Roorkee ...	12,246	...	...	...	...	...	...
8	Muzaffar- nagar.	Kairana ...	16,683	51	3·06	...	...	...	...
9		Kandhla ...	10,365	268	25·86	...	...	...	...
10		Muzaffarnagar ...	23,937	268	11·20	7	·29	20	·83
11	Meerut	Meerut ...	77,711	50	·64	2	·02	70	·90
12		Hapur ...	20,388	4	·20	34	1·67	...	...
13		Ghaziabad ...	12,343	328	26·57	9	·73	...	...
14	Buland- shahr.	Khurja ...	25,719	653	25·39	9	·35	152	5·91
15		Sikandarabad ...	16,857	473	28·06	3	·18	9	·53
16		Bulandshahr ...	19,509	533	27·32	6	·31	36	1·84
17		Jahangirabad ...	10,279	160	15·56	...	...	...	...
18	Aligarh	Aligarh or Keil...	66,963	955	14·26	...	...	36	·54
19		Hathras ...	38,763	124	3·20	93	2·40	9	·23
20		Atrauli ...	13,018	208	15·98	...	...	...	...
21	Muttra	Muttra ...	48,724	174	3·57	181	3·71	33	·68
22		Brindaban ...	14,632	532	36·36	...	...	38	2·60
23	Agra	Agra ...	163,750	2,245	13·71	284	1·74	75	·46
24		Firozabad ...	20,183	217	10·75	4	·20	65	3·22
25	Mainpuri	Mainpuri ...	14,352	169	11·77	1	·07	4	·28
26		Shikohabad ...	10,374	101	9·74	1	·10	...	...
27	Etah	Kasganj ...	20,988	273	13·01	2	·09	12	·57
28		Soron ...	10,175	8	·78	...	...	...	...
29	Bareilly	Bareilly ...	1,19,175	105	·88	...	...	...	...
30		Aonla ...	13,132	146	11·12	...	...	7	·53
31	Bijnor	Nagina ...	18,736	233	12·43	4	·21	2	·11
32		Najibabad ...	18,504	138	7·46	...	...	21	1·13
33		Bijnor ...	18,095	217	11·99	...	...	1	·05
34		Sherkot ...	13,889	227	16·34	...	...	...	...
35		Chandpur ...	11,032	43	3·90	...	...	...	...
36		Kiratpur ...	14,869	154	10·36	...	...	...	...
37	Budaun	Ujhani ...	11,186	195	17·43	1	·09	11	·98
38		Budaun ...	39,118	835	21·36	1	·02	37	·94
39		Sahaswan ...	15,972	335	20·97	2	·12	1	·06
40	Moradabad	Moradabad ...	82,671	824	9·97	6	·07	41	·49
41		Sambhal ...	41,585	857	20·61	...	...	121	2·91
42		Amroha ...	40,448	476	11·77	43	1·06	104	2·57
43		Chandausi ...	25,164	162	6·44	23	·91	60	2·38
44	Shahjahan- pur.	Tilhar ...	16,584	...	...	...	...	...	...
45		Shahjahanpur ...	63,782	49	·71	47	·68	5	·07

(a) Rates calculated on average population 14,735.



## ANNUAL FORM No. VI (a).

Population of 10,000 and upwards) and **Districts** (exclusive of such towns)  
 during the year 1923—(contd.).

8		9		10		11		12		13		14		Number.
Relapsing fever.		Kala Azar.		Other fevers.		Dysentery.		Diarrhoea.		Pneumonia.		Phthisis.		
Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.	
6	·17	...	...	182	5·34	20	·59	52	1·52	45	1·32	66	1·93	1
...	...	1	·06	42	2·85	4	·27	4	·27	13	·88	...	...	2
...	...	...	...	621	20·16	21	·68	118	3·83	8	·26	28	·91	3
...	...	...	...	1 587	25·49	38	·61	50	·80	15	·24	1	...	4
...	...	...	...	470	26·27	6	·33	...	...	...	...	1	·05	5
...	...	...	...	262	22·12	...	...	6	·51	...	...	...	...	6
...	...	...	...	308	25·15	7	·57	28	2·29	...	...	...	...	7
...	...	...	...	364	21·82	...	...	...	...	...	...	...	...	8
...	...	...	...	43	4·14	...	...	1	·09	...	...	1	·09	9
...	...	...	...	145	6·06	3	·12	22	·92	...	...	1	·04	10
...	...	...	...	421	5·42	56	·72	182	2·34	262	3·37	253	3·25	11
...	...	...	...	84	4·12	14	·69	105	5·15	...	...	...	...	12
...	...	...	...	5	·40	...	...	8	·65	...	...	1	·08	13
...	...	...	...	84	3·27	28	1·09	55	2·14	15	·58	2	·08	14
5	·30	...	...	42	2·49	8	·47	19	1·13	...	...	2	·12	15
1	·05	...	...	10	·51	10	·51	3	·15	...	...	1	·05	16
...	...	...	...	21	2·04	2	·19	...	...	...	...	...	...	17
...	...	...	...	263	3·93	46	·69	92	1·37	...	...	4	·06	18
...	...	...	...	206	5·31	31	·80	410	10·58	12	·31	3	·08	19
...	...	...	...	...	...	9	·69	96	7·37	...	...	...	...	20
...	...	...	...	394	8·09	70	1·44	110	2·26	147	3·01	117	2·40	21
...	...	...	...	2	·14	7	·48	55	3·76	10	·67	...	...	22
...	...	1	·01	48	·29	72	·44	197	1·20	778	4·75	458	2·80	23
3	·15	...	...	1	·05	1	·05	54	2·67	...	...	38	1·88	24
...	...	...	...	21	1·46	...	...	...	...	...	...	...	...	25
...	...	...	...	9	·87	...	...	...	...	...	...	...	...	26
...	...	...	...	47	2·24	2	·09	52	2·48	...	...	...	...	27
...	...	...	...	200	19·66	...	...	69	6·78	...	...	...	...	28
...	...	...	...	809	6·79	36	·30	2	·02	19	·16	217	1·82	29
...	...	...	...	22	1·67	9	·68	51	3·88	...	...	...	...	30
...	...	...	...	59	3·15	15	·80	32	1·71	1	·05	1	·05	31
...	...	...	...	185	10·00	4	·21	32	1·73	...	...	...	...	32
...	...	...	...	33	1·84	10	·55	34	1·88	...	...	...	...	33
...	...	...	...	...	...	...	...	...	...	...	...	...	...	34
...	...	...	...	121	10·97	2	·18	...	...	...	...	...	...	35
...	...	...	...	...	...	...	...	...	...	...	...	...	...	36
1	·09	...	...	...	...	1	·09	6	·54	...	...	...	...	37
...	...	...	...	55	1·41	13	·33	41	1·05	3	·08	24	·61	38
...	...	...	...	...	...	2	·12	26	1·63	...	...	...	...	39
...	...	3	·03	389	4·70	61	·74	142	1·72	152	1·83	147	1·78	40
...	...	...	...	...	...	33	·79	53	1·27	2	·05	1	·02	41
...	...	...	...	108	2·67	55	1·36	52	1·28	...	...	...	...	42
2	·08	...	...	138	5·48	12	·48	106	4·21	5	·20	26	1·03	43
...	...	3	·18	305	18·39	11	·66	7	·42	1	·06	18	1·08	44
...	...	...	...	605	8·79	71	1·03	80	1·16	24	·35	114	1·66	45



Paragraphs 23, 47 and 54.]

## SUPPLEMENTARY ANNUAL FORM No. VI(a).

Deaths registered from **Certain Causes** in the **Towns** (having a population of 10,000 and upwards) and **Districts** (exclusive of such towns) of the United Provinces during the year 1923—(contd.)

1 Number.	2 Districts.	3 Towns.	4 Popula- tion according to census of 1921.	15 Other res- piratory diseases.		16 Deaths from child birth*	17 Deaths under one year.			18 Infant mort- ality rate.
				Deaths.	Ratio.		Male.	Female.	Total.	
		<i>B.—Towns. (contd).</i>								
1	Dehra Dun {	Dehra ...	34,092	84	2.46	14	158	119	277	266.35
2		Mussooree ...	(a) 11,882	32	2.17	4	33	24	57	254.46
3		Hardwar ...	30,795	25	.81	3	158	167	325	298.16
4	Saharanpur {	Union.								
5		Saharanpur	62,261	186	2.99	27	529	518	1,047	314.04
6		Deoband ...	17,891	...	...	1	110	99	209	212.40
7	Muzaffarnagar {	Gangoh ...	11,843	2	.17	6	44	46	90	193.65
8		Roorkee ...	12,246	23	1.88	1	103	66	169	315.89
9		Kairana ...	16,633	1	.06	...	77	55	132	199.70
10	Meerut ... {	Kandhla ...	10,365	...	...	...	50	70	120	246.41
11		Muzaffarnagar	23,937	18	.75	5	121	73	194	198.97
12		Meerut ...	77,711	96	1.23	23	347	370	717	223.43
13	Bulandshahr {	Hapur ...	20,388	275	13.49	9	140	131	271	256.14
14		Ghaziabad ...	12,343	12	.97	...	48	65	113	208.10
15		Khurja ..	25,719	79	3.07	10	246	212	458	307.79
16	Jahangirabad {	Sikan talabad	16,857	21	1.24	3	142	130	272	276.98
17		Bulandshahr	13,500	27	1.38	8	127	109	236	234.13
19	Aligarh ... {	Jahangirabad	10,279	1	6.10	...	26	25	51	135.27
19		Aligarh or	66,963	183	2.73	19	551	444	995	298.17
20		Koil.								
21	Muttra ... {	Hathras ...	38,763	228	5.88	39	296	237	533	244.38
22		Atrauli	13,018	3	.23	5	92	71	163	212.24
23		Muttra ...	48,724	260	5.34	22	310	284	594	237.41
24	Agra ... {	Brindaban...	14,632	53	3.62	7	95	70	165	331.99
25		Agra ...	163,750	475	2.90	78	1,107	946	2,053	217.29
26		Firozabad ...	20,183	40	1.98	4	132	111	243	278.03
27	Mainpuri ... {	Mainpuri ...	14,352	1	.07	4	39	28	67	211.36
28		Shikohabad	10,374	5	.48	...	15	17	32	109.96
29		Kasganj ...	20,988	17	.81	...	115	78	193	204.45
30	Etah ... {	Soron ...	10,175	36	3.54	8	88	67	153	279.71
31		Bareilly ...	119,175	293	2.46	14	326	279	605	156.57
32		Aonla ...	13,132	44	3.35	6	134	128	262	305.72
33	Bijnor ... {	Nagina ...	18,736	53	2.83	9	122	94	216	189.81
34		Najibabad ...	18,504	59	3.19	6	107	101	208	198.47
35		Bijnor ...	18,095	10	.55	4	96	76	172	193.04
36	Chandpur ... {	Sherkot ...	13,889	...	...	2	57	53	110	184.56
37		Chandpur ...	11,032	14	1.27	2	71	66	137	191.88
38		Kiratpur ...	14,869	...	...	1	32	35	67	127.13
39	Budaun ... {	Ujhani ...	11,186	4	.37	...	52	45	97	243.11
40		Budaun ...	39,118	60	1.53	8	350	251	601	299.30
41		Sahaswan ...	15,972	13	.81	3	117	117	234	292.13
42	Moradabad {	Moradabad ..	82,671	474	5.73	27	617	523	1,140	245.90
43		Sambhal ...	41,585	5	1.32	10	245	214	459	206.38
44		Amroha ...	40,443	97	2.40	10	216	176	392	175.78
45	Shahjahanpur {	Chandausi ...	25,164	108	4.29	8	198	196	394	297.13
46		Tilhar ...	16,584	27	1.63	8	125	120	245	266.01
47	Shahjahanpur {	Shahjahanpur	68,782	518	7.53	12	245	227	472	157.23

(a) Rates calculated on average population 14,735.

\* NOTE—By the term "Deaths from child-birth" is meant "deaths during or within 14 days of labour."



## SUPPLEMENTARY ANNUAL FORM No. VI (a)—(contd).

Deaths registered from **Certain Causes** in the **Towns** (having a population of 10,000 and upwards) and **Districts** (exclusive of such towns) of the United Provinces during the year 1923—(contd).

1 Number.	2 Districts.	3 Towns.	4 Popula- tion according to census of 1921.	5 Malaria.		6 Enteric fever.		7 Measles.	
				Deaths	Ratio.	Deaths	Ratio.	Deaths	Ratio.
		<i>B.—Towns— (concl'd.)</i>							
46	Pilibhit ..	Pilibhit ...	32,344	294	9·09	...	...	23	·71
47	Farrukh- abad.	Farrukhabad - cum Fateh- garh.	48,331	236	4·88	220	4·55	17	·35
48		Kanauj ...	18,258	230	12·60	...	...	1	·05
49	Etawah ...	Etawah ...	41,553	23	·55	43	1·03	113	2·72
50	Cawnpore...	Cawnpore ..	195,085	33	·17	1	...	588	3·01
51	Fatehpur...	Fatehpur ...	14,948	30	2·01	...	...	...	...
52	Allahabad...	Allahabad ...	145,605	9	·06	25	·17	228	1·56
53		Jhansi ...	54,395	...	...	17	·31	97	1·78
54	Jhansi ...	Mau ...	12,554	316	25·17	6	·48	4	·32
55		Lalitpur ...	11,504	223	19·38	7	·61	14	1·22
56	Jalaun ...	Kalpi ...	10,037	186	18·53	...	...	7	·70
57		Konch ..	14,503	...	...	...	...	6	·41
58	Hamirpur...	Mahoba ...	11,648	147	12·62	...	...	12	1·03
59	Banda ...	Banda ...	20,029	29	1·45	1	·05	3	·15
60	Benares ...	Benares ...	195,373	1,784	9·13	427	2·18	241	1·23
61	Mirzapur ...	Mirzapur Bin- dhachal.	54,994	985	17·91	8	·14	36	·65
62	Jaunpur ...	Jaunpur ...	32,569	4	·12	2	·06	1	·03
63	Ghazipur ...	Ghazipur ...	24,708	274	11·09	...	...	2	·08
64	Ballia ...	Ballia ...	18,215	111	6·09	7	·38	...	...
65	Gorakhpur {	Gaura Barhaj	12,497	170	13·60	...	...	...	...
66		Gorakhpur ...	50,498	5	·10	3	·06	23	·45
67	Basti ...	Basti ...	17,691	87	4·92	...	...	...	...
68		Mubarakpur ...	12,500	79	6·34	10	·80	1	·08
69	Azamgarh...	Azamgarh ...	14,788	102	6·90	41	2·77	...	...
70		Mau ...	17,998	93	5·17	...	...	1	·05
71	Naini Tal... {	Naini Tal ...	(b) 10,392	25	1·86	1	·07	3	·22
72		Kashipur ...	10,576	54	5·10	31	2·93	3	·28
73	Lucknow ...	Lucknow ...	217,167	258	1·19	240	1·10	92	·42
74	Unao ...	Unao ...	11,147	207	18·57	...	...	8	·72
75	Rae Bareli	Rae Bareli ...	16,183	...	...	...	...	1	·06
76		Khairabad ...	11,522	168	14·58	12	1·04	21	1·81
77	Sitapur .. {	Laharpur ...	11,135	...	...	...	...	...	...
78		Sitapur ...	18,432	...	...	1	·05	19	1·04
79		Shahabad ...	18,696	245	13·10	...	...	...	...
80	Hardoi ... {	Sandila ...	14,074	316	22·45	...	...	8	·57
81		Hardoi ...	14,412	209	14·50	...	...	1	·07
82	Kheri ...	Lakhimpur ...	12,396	82	6·61	...	...	...	...
83	Fyzabad ... {	Fyzabad-Ajodh- ya.	51,342	664	12·93	...	...	14	·27
84		Tanda ...	13,053	292	16·17	2	·11	6	·33
85	Gonda ... {	Gonda ...	13,228	211	15·95	...	...	...	...
86		Bahrampur ..	16,131	593	24·36	...	...	...	...
87	Bahraich ...	Bahraich ..	27,371	370	13·51	4	·15	37	1·35
88	Bara Banki {	Nawabganj ...	12,369	156	12·61	2	·16	...	...
89		Rudauli ...	10,327	218	21·11	...	...	2	·19
		Total of towns	3,003,293	22,200	7·39	1,921	·64	2,631	·88
		Total of Rural districts.	42,372,494	643,119	15·18	12,366	·19	2,685	·06
		Total for the Province.	45,375,787	665,319	14·66	14,287	·31	5,316	·12

(b) Rates calculated on average population 13,454.



SUPPLEMENTARY

*Deaths registered from **Certain Causes** in the **Towns** (having a  
of the United Provinces*

1 Number.	2 Districts.	3 Towns.	4 Popula- tion according to census of 1921.	8 Relapsing fever.		9 Kala Azar.		10 Other fevers.		11 Dysentery.	
				Deaths.	Ratio	Deaths.	Ratio.	Deaths	Ratio	Deaths.	Ratio.
		<i>B — Towns— (concl'd)</i>									
46	Pilibhit ...	Pilibhit ...	32,344	...	...	...	...	230	7.11	28	.86
47	Farrukh- abad.	Farrukhabad- cum Fateh- garh.	48,331	...	...	...	...	51	1.05	86	1.78
48		Kananj ...	18,258	...	...	...	...	17	.93	...	...
49	Etawah ...	Etawah ...	41,558	...	...	...	...	501	12.05	8	.19
50	Cawnpore ...	Cawnpore ...	195,085	...	...	...	...	2,824	14.47	382	1.96
51	Fatehpur ...	Fatehpur ...	14,948	...	...	...	...	218	14.58	...	...
52	Allahabad ...	Allahabad ...	145,605	...	...	...	...	1,387	9.52	97	.67
53		Jhansi ...	54,385	...	...	...	...	1,115	20.50	10	.18
54	Jhansi ...	Mau ...	12,554	...	...	...	...	...	...	...	...
55		Lalitpur ...	11,504	...	...	...	...	2	.17	4	.35
56	Jalaun ...	Kalpi ...	10,037	...	...	...	...	2	.20	1	.10
57		Konch ...	14,503	...	...	...	...	334	23.04	...	...
58	Hamirpur ...	Mahoba ...	11,648	...	...	...	...	...	...	11	.94
59	Banda ...	Banda ...	20,029	...	...	...	...	473	23.61	13	.65
60	Benares ...	Benares ...	195,373	...	...	2	.01	2,656	13.59	246	1.26
61	Mirzapur ...	Mirzapur Bin- dhachal.	54,994	...	...	...	...	5	.09	12	.22
62	Jaunpur ...	Jaunpur ...	32,569	3	.09	8	.23	453	13.91	70	2.15
63	Ghazipur ...	Ghazipur ...	24,708	...	...	...	...	...	...	17	.69
64	Ballia ...	Ballia ...	18,215	...	...	...	...	30	1.65	21	1.15
65	Gorakhpur ...	Gaura Barhaj	12,497	...	...	...	...	...	...	1	.08
66		Gorakhpur ...	50,493	...	...	...	...	623	12.34	35	.69
67	Basti ...	Basti ...	17,691	...	...	...	...	...	...	...	...
68		Mubarakpur	12,500	...	...	...	...	...	...	9	.72
69	Azamgarh ...	Azamgarh ...	14,788	...	...	...	...	4	.27	23	1.55
70		Mau ...	17,998	...	...	...	...	...	...	12	.67
71	Naini Tal ...	Naini Tal	(b) 10,392	...	...	...	...	18	1.33	10	.74
72		Kashipur ...	10,576	2	.19	...	...	5	.47	8	.76
73	Lucknow ...	Lucknow ...	217,167	2	.01	5	.02	1,576	7.27	245	1.13
74	Unao ...	Unao ...	11,147	...	...	...	...	3	.27	14	1.25
75	Rae Bareli	Rae Bareli ...	16,183	...	...	...	...	318	19.65	38	2.35
76		Khairabad ...	11,522	...	...	...	...	...	...	24	2.08
77	Sitapur ...	Laharpur ...	11,135	...	...	...	...	207	18.51	...	...
78		Sitapur ...	18,432	...	...	...	...	279	15.13	27	1.46
79		Shahabad ...	18,696	...	...	...	...	7	.37	3	.16
80	Hardoi ...	Sandila ...	14,074	...	...	...	...	...	...	19	1.35
81		Hardoi ...	14,412	...	...	...	...	1	.07	3	.21
82	Kheri ...	Lakhimpur ...	12,396	...	...	...	...	...	...	...	...
83		Fyzabad	51,342	...	...	...	...	7	.14	76	1.48
84	Fyzabad ...	Ajodhya.	...	...	...	...	...	...	...	...	...
85		Tanda ...	18,058	...	...	...	...	1	.05	20	1.11
86	Gonda ...	Gonda ...	13,228	...	...	...	...	...	...	...	...
87	Bahraich ...	Bulrampur ...	16,131	...	...	...	...	...	...	...	...
88		Bahraich ...	27,371	...	...	...	...	...	...	2	.07
89	Bara Banki	Nawabganj ...	12,369	...	...	...	...	2	.16	6	.48
		Rudauli ...	10,327	...	...	...	...	...	...	9	.87
		Total of towns	3,003,293	25	.01	23	.01	22,060	7.34	2,380	.79
		Total of Rural districts.	42,372,494	225	.	63	.	72,731	1.72	2,720	.06
		Total for the Province.	45,375,787	250	.	86	...	94,791	2.09	5,100	.11

(b) Rates calculated on average population 13,454.



## ANNUAL FORM No. VI (a).

population of 10,000 and upwards) and **Districts** (exclusive of such towns) during the year 1923—(concl.)

12		13		14		15		16	17			18	Number.
Diarrhoea.		Pneumonia		Phthisis.		Other respir- atory diseases.		Deaths from child birth.*	Deaths under one year.			Infant mort- ality rate.	
Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.		Male.	Female	Total.		
38	1·17	...	...	...	...	388	12·00	9	303	205	508	266·25	46
87	1·80	281	5·81	192	3·97	173	3·58	23	419	320	739	319·36	47
22	1·20	...	...	...	...	24	1·31	7	77	68	145	259·86	48
129	3·10	17	·41	82	1·97	214	5·15	4	476	357	833	372·04	49
75	·38	1,351	6·92	635	3·25	497	2·55	55	2,261	1,588	3,849	495·17	50
2	·13	...	...	...	...	3	·20	1	50	45	95	191·92	51
186	1·28	72	·49	370	2·54	769	5·28	53	992	834	1,826	279·97	52
73	1·34	16	·29	1	·02	77	1·41	12	394	354	748	295·89	53
60	3·98	...	...	...	...	159	12·66	2	133	111	244	368·58	54
33	2·87	...	...	...	...	49	4·26	6	59	61	120	207·25	55
16	1·49	...	...	14	1·39	105	10·46	...	85	70	155	315·04	56
16	1·10	158	10·89	...	...	35	2·41	...	127	70	197	261·27	57
3	·26	...	...	1	·08	205	17·60	...	62	51	113	216·47	58
12	·60	...	...	...	...	49	2·45	6	101	66	167	270·23	59
594	3·04	170	·87	393	2·01	1,446	7·40	69	1,561	1,329	2,890	298·09	60
55	1·00	...	...	2	·04	70	1·27	8	336	266	602	233·42	61
21	·64	10	·31	22	·67	46	1·41	12	123	77	200	175·90	62
10	·40	...	...	22	·89	20	·81	2	44	61	105	150·86	63
12	·66	...	...	...	...	11	·60	...	41	34	75	151·51	64
1	·08	...	...	1	·08	6	·48	...	21	17	38	78·03	65
36	·71	...	...	124	2·46	37	·73	12	257	199	456	198·43	66
...	...	...	...	...	...	...	...	...	15	17	32	173·91	67
19	1·52	...	...	...	...	8	·64	2	52	32	84	211·59	68
7	·47	1	·07	9	·61	18	1·22	1	49	24	73	167·05	69
33	1·83	...	...	18	1·00	20	1·11	7	28	38	66	162·56	70
16	1·19	86	6·39	42	3·12	20	1·49	3	26	29	55	164·18	71
46	4·35	14	1·32	6	·57	49	4·63	9	69	50	119	213·64	72
311	1·43	1,160	5·34	982	4·52	385	1·77	102	1,635	1,314	2,949	288·49	73
2	·18	6	·54	2	·18	31	2·78	3	74	51	125	249·50	74
...	...	...	...	...	...	18	1·11	...	116	108	224	301·89	75
5	·43	...	...	1	·08	18	1·56	...	61	68	129	222·03	76
...	...	...	...	...	...	...	...	1	48	41	89	173·83	77
50	2·71	...	...	4	·22	31	1·68	7	155	140	295	314·16	78
7	·37	...	...	...	...	16	·85	2	88	68	156	178·90	79
18	1·28	...	...	...	...	28	1·99	...	135	108	243	298·89	80
3	·21	...	...	...	...	12	·83	...	61	62	123	260·04	81
2	·16	...	...	...	...	...	...	...	27	12	39	336·21	82
57	1·11	18	·85	36	·70	264	5·14	22	288	210	498	306·84	83
17	·94	...	...	25	1·38	16	·88	...	102	94	196	218·75	84
2	·15	...	...	...	...	...	...	...	45	21	66	151·72	85
...	...	...	...	...	...	5	·31	...	90	64	154	208·95	86
12	·44	...	...	5	·18	14	·51	7	93	65	158	181·19	87
10	·81	...	...	12	·97	8	·65	...	63	43	106	234·34	88
17	1·65	...	...	...	...	26	2·52	2	92	53	145	267·53	89
4,556	1·52	4,872	1·62	4,526	1·51	9,382	3·12	879	19,741	16,228	35,969	263·91	
1,222	·03	216	...	296	·01	6,816	·16	410	130,826	110,199	241,025	160·77	
5,778	·13	5,088	·11	4,822	·11	16,198	·36	1,289	150,567	126,427	276,994	169·37	

\* NOTE.—By the term "Deaths from child-birth" is meant "deaths during or within 14 days of labour."



Deaths registered from **cholera** in the districts of the

1	2	3		4						
Number.	District.	Circles of registration.		Villages.		January.	February.	March.	April.	May.
		Number in each district.	Number from which deaths from cholera were reported.	Number in each district.	Number from which deaths from cholera were reported.					
MEERUT DIVISION.										
1	Dehra Dun ...	13	2	466	2	..	..	..	..	1
2	Saharanpur ...	30	2	1,618	2	..	..	..	..	1
3	Muzaffarnagar ...	26	..	917	..	..	..	..	..	..
4	Meerut ...	45	7	1,331	7	..	1	..	..	..
5	Bulandshahr ...	35	6	1,514	7	..	..	..	..	..
AGRA DIVISION.										
6	Aligarh ...	35	20	1,722	34	..	..	1	..	1
7	Muttra ...	31	11	838	11	2	..	2	..	..
8	Agra ...	37	7	1,195	13	..	..	..	..	..
9	Mainpuri ...	22	4	1,377	9	..	..	..	..	..
10	Etah ...	29	7	1,518	14	..	..	..	..	1
ROHILKHAND DIVISION.										
11	Bareilly ...	32	6	1,953	8	..	..	1	3	..
12	Bijnor ...	31	7	2,075	7	..	..	..	1	1
13	Budaun ...	27	10	1,845	16	..	..	2	1	4
14	Moradabad ...	32	12	2,487	12	..	..	2	7	..
15	Shahjahanpur ...	23	1	2,050	1	..	..	..	..	..
16	Pilibhit ...	14	6	1,058	7	..	..	..	..	2
ALLAHABAD DIVISION.										
17	Farrukhabad ...	24	2	1,672	2	..	..	..	..	..
18	Etawah ...	25	3	1,476	3	..	..	..	..	..
19	Cawnpore ...	28	1	1,982	1	..	..	..	..	..
20	Fatehpur ...	16	..	1,384	..	..	..	..	..	..
21	Allahabad ...	37	4	3,525	5	..	1	8	1	1
JHANSI DIVISION.										
22	Jhansi ...	41	1	1,323	1	..	..	..	..	..
23	Jalaun ...	18	1	841	1	..	..	..	1	..
24	Hamirpur ...	24	..	758	..	..	..	..	..	..
25	Banda ...	26	1	1,183	1	..	..	..	..	..
BENARES DIVISION.										
26	Benares ...	19	2	1,979	2	..	..	..	..	..
27	Mirzapur ...	24	3	2,972	6	..	..	..	2	..
28	Jaunpur ...	22	4	3,134	4	..	..	..	1	4
29	Ghazipur ...	23	10	2,562	21	..	2	..	..	14
30	Ballia ..	21	16	1,925	59	..	..	..	..	4
GORAKHPUR DIVISION.										
31	Gorakhpur ...	46	13	7,595	23	..	..	1	5	6
32	Basti ...	25	8	6,962	12	..	..	..	12	14
33	Azamgarh ...	33	11	4,814	24	..	..	..	5	2
KUMAUN DIVISION.										
34	Naini Tal ...	20	5	1,549	33	..	..	..	1	..
35	Almora ...	6	1	5,082	1	..	..	..	..	1
36	Gathwal ...	15	1	3,251	1	..	..	..	..	..
LUCKNOW DIVISION.										
37	Lucknow ...	16	1	934	1	..	..	..	..	1
38	Unao ...	19	2	1,688	2	..	..	..	..	1
39	Rae Bareilly ...	14	4	1,748	5	..	..	2	4	8
40	Sitapur ...	23	1	2,332	1	..	..	..	..	..
41	Hardoi ...	26	8	1,897	11	..	..	..	1	..
42	Kheri ...	16	2	1,730	3	..	..	..	..	..
FYZABAD DIVISION.										
43	Fyzabad ...	23	4	2,706	4	1	..	1	5	..
44	Gonda ...	25	7	2,762	15	..	..	..	1	9
45	Bahraich ...	19	..	1,979	..	..	..	..	..	..
46	Sultanpur ...	14	2	2,490	2	..	..	3	1	..
47	Pattabgarh ...	17	3	2,191	3	..	..	1	..	5
48	Bara Banki ...	23	1	2,070	1	..	..	..	1	..
Total for the Province		1,190	230	104,459	396	3	4	24	53	81



FORM NO. VII.

United Provinces during each month of the year 1923.

5							6			7			8	9
June.	July.	August.	September.	October.	November.	December.	Total.			Ratio of deaths per 1,000 of population.			Mean ratio per 1,000 of previous five years	Number.
							Male.	Female.	Total.	Male.	Female.	Total.		
...	...	...	3	...	...	...	4	...	4	·03	...	·02	·45	1
...	...	...	17	1	...	...	15	4	19	·03	·01	·02	·24	2
...	...	...	...	...	...	...	...	...	...	...	...	...	·27	3
...	1	7	10	5	...	...	12	12	24	·01	·02	·02	·17	4
1	2	3	37	13	...	...	35	21	56	·06	·04	·05	·14	5
...	...	36	279	18	2	...	198	141	339	·34	·29	·32	·16	6
1	...	2	17	...	...	...	15	9	24	·04	·03	·04	·11	7
...	1	15	152	5	...	...	83	90	173	·16	·22	·19	·29	8
...	...	...	48	...	...	...	25	23	48	·06	·07	·06	·04	9
...	...	31	76	20	...	...	64	64	128	·14	·17	·15	·17	10
...	1	2	4	18	27	...	33	23	56	·06	·05	·05	1·38	11
...	1	...	1	...	3	...	3	4	7	·01	·01	·01	·61	12
6	...	2	5	3	...	...	17	6	23	·03	·01	·02	1·76	13
1	2	2	5	1	...	...	12	8	20	·02	·01	·02	1·59	14
...	...	6	11	...	...	...	6	11	17	·01	·03	·02	·69	15
...	...	2	65	18	3	...	45	45	90	·20	·22	·21	1·87	16
1	2	...	...	...	...	...	3	...	3	·01	...	...	·23	17
2	...	1	3	...	...	...	4	2	6	·01	·01	·01	·16	18
4	...	...	1	...	...	...	2	3	5	...	...	...	·55	19
...	...	...	...	...	...	...	...	...	...	...	...	...	·62	20
1	3	5	3	...	...	...	11	12	23	·01	·02	·02	1·25	21
...	...	...	2	...	...	...	...	2	2	...	·01	...	·24	22
...	...	...	...	...	...	...	...	1	1	...	...	...	·50	23
...	...	...	...	...	...	...	...	...	...	...	...	...	1·02	24
2	...	...	...	...	...	...	2	...	2	·01	...	...	1·15	25
8	2	66	5	42	1	...	65	59	124	·14	·13	·14	1·90	26
4	...	3	3	...	...	...	8	4	12	·02	·01	·02	2·04	27
1	1	2	1	...	...	...	5	5	10	·01	·01	·01	2·49	28
7	18	70	35	48	3	...	101	96	197	·24	·23	·24	1·93	29
13	127	196	134	38	7	...	273	246	519	·64	·61	·62	1·86	30
2	...	8	50	91	...	...	84	79	163	·05	·05	·05	2·58	31
...	...	...	...	10	14	...	29	21	50	·03	·02	·02	2·98	32
5	3	4	19	43	3	...	53	31	84	·07	·04	·05	1·96	33
...	...	1	69	47	1	1	77	43	120	·48	·37	·43	1·86	34
...	...	...	...	...	...	...	...	1	1	...	...	...	2·72	35
...	...	...	1	...	...	...	...	1	1	...	...	...	2·75	36
4	...	...	1	...	...	...	5	1	6	·01	...	·01	·61	37
1	...	...	...	...	...	...	2	...	2	...	...	...	1·04	38
...	...	...	...	...	...	...	8	6	14	·02	·01	·01	2·16	39
...	...	...	...	3	...	...	...	3	3	...	...	...	2·69	40
2	2	3	1	16	...	...	17	8	25	·03	·02	·02	·63	41
...	...	...	5	15	6	...	11	15	26	·02	·03	·03	2·20	42
8	...	1	1	1	...	...	9	9	18	·01	·01	·01	2·10	43
69	20	2	...	1	13	...	51	64	115	·07	·09	·08	3·23	44
...	...	...	...	...	...	...	...	...	...	...	...	...	4·42	45
...	...	1	...	...	...	...	3	2	5	·01	...	...	3·26	46
...	...	...	...	...	...	...	4	2	6	·01	...	·01	3·44	47
...	...	19	...	...	...	...	10	10	20	·02	·02	·02	1·66	48
143	186	492	1,064	457	83	1	1,404	1,187	2,591	·06	·05	·06	1·56	



Deaths registered from **small-pox** in the districts

1	2	3		4		5						
		Circles of registration.		Villages.		January.	February.	March.	April.	May.	June.	July.
Number.	District.	Number in each district.	Number from which deaths from small-pox were reported.	Number in each district.	Number from which deaths from small-pox were reported.							
MEERUT DIVISION.												
1	Dehra Dun ...	13	3	466	3	1	...	...	...	...	2	...
2	Saharanpur ...	30	5	1,618	5	...	1	...	2	2	4	4
3	Muzaffarnagar ...	26	1	917	1	...	...	...	...	...	...	...
4	Meerut ...	45	8	1,331	8	...	1	1	2	2	9	1
5	Bulandshahr ...	35	3	1,514	3	...	...	4	3	7	41	11
AGRA DIVISION.												
6	Aligarh ...	35	7	1,722	7	...	...	2	7	12	18	13
7	Muttra ...	31	5	838	5	...	...	...	...	1	8	4
8	Agra ...	37	6	1,195	6	...	1	2	4	7	16	5
9	Mainpuri ...	22	...	1,377	...	...	...	...	...	...	...	...
10	Etah ...	29	4	1,518	4	...	...	...	...	1	3	...
ROHILKHAND DIVISION.												
11	Bareilly ...	32	5	1,953	5	...	...	...	3	1	4	...
12	Bijnor ...	31	2	2,075	2	...	...	...	...	2	...	...
13	Budaun ...	27	2	1,845	2	...	...	1	...	1	1	...
14	Moradabad ...	32	7	2,487	7	...	...	2	6	3	3	2
15	Shahjahanpur ...	23	...	2,050	...	...	...	...	...	...	...	...
16	Pilibhit ...	14	...	1,058	...	...	...	...	...	...	...	...
ALLAHABAD DIVISION.												
17	Farrukhabad ...	24	2	1,672	2	...	...	...	2	...	...	...
18	Etawah ...	25	1	1,476	1	...	...	...	1	...	...	...
19	Cawnpore ...	28	2	1,982	2	...	...	...	1	...	...	...
20	Fatehpur ...	16	...	1,384	...	...	...	...	...	...	...	...
21	Allahabad ...	37	13	3,525	33	2	1	6	31	58	77	25
JHANSI DIVISION.												
22	Jhansi ...	41	2	1,323	2	...	...	...	...	...	1	...
23	Jalaun ...	18	...	841	...	...	...	...	...	...	...	...
24	Hamirpur ...	24	1	758	1	...	...	...	...	...	1	...
25	Banda ...	26	3	1,183	3	...	...	2	1	...	1	5
BENARES DIVISION.												
26	Benares ...	19	5	1,979	5	...	...	2	1	1	...	3
27	Mirzapur ...	24	8	2,972	12	...	6	1	5	1	8	4
28	Jaunpur ...	22	8	3,134	13	...	1	1	1	1	4	6
29	Ghazipur ...	23	1	2,562	1	...	...	...	2	...	...	...
30	Ballia ...	21	3	1,925	3	...	2	...	...	...	4	...
GORAKHPUR DIVISION.												
31	Gorakhpur ...	46	5	7,595	6	2	...	6	5	...	1	...
32	Basti ...	25	1	6,962	1	1	...	...	...	...	...	...
33	Azamgarh ...	33	5	4,814	10	1	2	2	4	1	2	...
KUMAUN DIVISION.												
34	Naini Tal ...	20	1	1,549	1	...	...	1	...	...	...	...
35	Almora ...	6	3	5,082	8	1	...	2	...	...	7	1
36	Garhwal ...	15	...	3,251	...	...	...	...	...	...	...	...
LUCKNOW DIVISION.												
37	Lucknow ...	16	5	934	5	1	...	2	1	1	5	1
38	Unao ...	19	1	1,688	1	...	...	...	...	1	...	...
39	Rae Bareli ...	14	5	1,748	6	...	...	...	3	8	26	6
40	Sitapur ...	23	2	2,332	2	...	...	...	...	...	...	1
41	Hardoi ...	26	1	1,897	1	...	...	...	...	...	2	...
42	Kheri ...	16	...	1,730	...	...	...	...	...	...	...	...
FYZABAD DIVISION.												
43	Fyzabad ...	23	2	2,706	3	...	...	...	...	1	...	...
44	Gonda ...	25	2	2,762	2	...	...	...	...	...	1	1
45	Bahraich ...	19	3	1,979	3	...	...	...	...	...	...	...
46	Sultanpur ...	14	2	2,490	2	...	...	1	2	...	1	...
47	Partabgarh ...	17	3	2,190	11	...	1	4	...	2	4	8
48	Bara Banki ...	23	2	2,070	2	...	...	...	2	1	...	...
Total for the Province		1,190	150	104,459	200	9	16	42	89	115	254	101



FORM No. VIII.

the United Provinces during each month of the year 1923.

					6			7		8			9	10
	September.	October.	November.	December.	Total.			Number of these deaths among children.		Ratio of deaths per 1,000 of population.			Mean ratio per 1,000 of previous five years.	Number.
					Male.	Female.	Total.	Under year.	One to 10 years.	Male.	Female.	Total.		
1	...	...	...	...	3	...	3	...	...	·02	...	·01	·05	1
1	...	...	...	1	9	6	15	...	15	·02	·01	·02	·06	2
1	...	...	...	8	4	4	8	4	...	·01	·01	·01	·01	3
1	1	...	...	...	5	13	18	7	11	·01	·02	·01	·04	4
1	1	1	...	...	31	38	69	69	...	·05	·07	·06	·03	5
1	...	2	3	1	31	28	59	3	...	·05	·06	·05	·08	6
1	...	...	2	...	10	6	16	4	4	·03	·02	·02	·03	7
3	...	2	2	10	31	21	52	7	36	·06	·05	·06	·10	8
...	...	...	...	...	...	...	...	...	...	...	...	...	·04	9
...	...	2	2	2	4	6	10	2	8	·01	·01	·01	·08	10
...	...	...	...	2	9	1	10	1	2	·02	...	·01	·03	11
...	...	...	...	...	1	1	2	2	...	...	...	...	·03	12
...	...	1	...	...	4	...	4	3	1	·01	...	...	·21	13
...	...	1	...	2	7	12	19	3	16	·01	·02	·01	·09	14
...	...	...	...	...	...	...	...	...	...	...	...	...	·07	15
...	...	...	...	...	...	...	...	...	...	...	...	...	·10	16
...	1	...	...	...	2	1	3	3	...	...	...	...	·07	17
...	...	...	...	...	1	...	1	1	...	...	...	...	·05	18
...	...	...	...	3	3	1	4	3	1	...	...	...	·37	19
...	...	...	...	...	...	...	...	...	...	...	...	...	...	20
1	4	...	...	3	134	94	228	63	111	·18	·14	·16	·12	21
...	1	...	...	...	2	...	2	1	1	·01	...	...	·09	22
...	...	...	...	...	...	...	...	...	...	...	...	...	·05	23
...	...	...	...	...	...	1	1	...	1	...	...	...	·04	24
...	...	...	...	...	3	6	9	...	9	·01	·02	·01	·06	25
...	...	...	...	...	4	3	7	4	3	·01	·01	·01	·13	26
2	1	1	...	2	19	12	31	9	8	·05	·03	·04	·08	27
1	...	...	2	...	11	6	17	1	16	·02	·01	·01	·16	28
...	...	...	...	...	1	1	2	...	1	...	...	...	·34	29
...	...	...	...	...	2	4	6	...	3	...	·01	·01	·02	30
...	...	...	...	...	8	6	14	1	6	...	...	...	·16	31
...	...	...	...	...	...	1	1	...	1	...	...	...	·07	32
...	...	...	...	...	8	4	12	4	1	·01	...	·01	·27	33
...	...	...	...	...	...	1	1	...	...	...	·01	...	·03	34
...	...	4	2	1	8	10	18	1	3	·03	·04	·03	·03	35
...	...	...	...	...	...	...	...	...	...	...	...	...	·01	36
...	1	...	2	1	8	7	15	9	6	·02	·02	·02	·15	37
...	...	...	...	...	1	...	1	...	1	...	...	...	·04	38
2	...	...	...	...	24	21	45	16	29	·05	·04	·05	·05	39
1	...	...	...	...	...	2	2	1	1	...	...	...	·01	40
...	...	1	1	3	3	4	7	3	4	...	·01	·01	·08	41
...	...	...	...	...	...	...	...	...	...	...	...	...	·02	42
...	1	1	...	...	3	...	3	...	3	...	...	...	·09	43
...	1	...	...	...	2	1	3	...	3	...	...	...	·03	44
...	2	1	...	...	1	2	3	3	1	...	...	...	·16	45
...	...	...	...	...	1	3	4	1	2	...	...	...	·03	46
...	...	...	...	...	14	5	19	5	6	·03	·01	·02	·11	47
...	...	...	...	...	3	...	3	...	3	...	...	...	·02	48
35	14	17	16	39	415	332	747	234	317	·02	·01	·02	·09	



Deaths registered from **fevers** in the **districts** of the United Provinces

1	2	3		4						
Number.	District.	Circles of re- gistration.		Villages.		January.	Feb- ruary.	March.	April.	Ma
		Number in each district.	Number from which deaths from fevers were re- ported.	Number in each district.	Number from which deaths from fevers were re- ported.					
MEERUT DIVISION.										
1	Dehra Dun ...	13	13	466	178	148	167	172	179	2
2	Saharanpur ...	30	30	1,618	1,603	1,242	1,012	1,271	1,472	2,1
3	Muzaffarnagar ...	26	26	917	917	988	661	743	722	1,2
4	Meerut ...	45	45	1,331	534	1,766	1,203	1,383	1,935	3,0
5	Bulandshahr ...	35	35	1,514	1,354	2,126	1,472	1,434	2,060	2,5
AGRA DIVISION.										
6	Aligarh ...	35	35	1,722	1,722	1,605	1,341	1,494	1,439	1,5
7	Muttra ...	31	24	838	831	740	632	687	699	9
8	Agra ...	37	37	1,195	1,195	1,326	1,137	1,205	1,253	1,7
9	Mainpuri ...	22	22	1,377	617	1,592	1,400	1,043	901	8
10	Etah ...	29	29	1,518	1,518	1,413	1,212	1,018	1,061	1,0
ROHILKHAND DIVISION.										
11	Bareilly ...	32	32	1,953	1,933	2,041	1,387	1,469	1,475	1,8
12	Bijnor ...	31	31	2,075	1,187	1,205	804	870	847	1,1
13	Budaun ...	27	27	1,845	1,658	2,464	1,687	1,327	1,552	1,6
14	Moradabad ..	32	32	2,487	2,487	2,104	1,495	1,356	1,848	2,1
15	Shahjahanpur ...	23	23	2,050	2,050	1,575	1,172	1,179	1,139	1,7
16	Pilibhit ..	14	14	1,058	579	705	670	611	490	7
ALLAHABAD DIVISION.										
17	Farrukhabad ...	24	24	1,672	1,257	2,361	1,866	1,764	1,624	1,5
18	Etawah ...	25	25	1,476	892	977	1,047	1,205	1,106	1,1
19	Cawnpore ...	28	28	1,982	1,131	1,579	1,900	1,940	1,064	1,6
20	Fatehpur ...	16	16	1,384	1,333	979	813	815	853	5
21	Allahabad ...	37	37	3,525	3,525	2,125	1,628	1,587	1,499	1,8
JHANSI DIVISION.										
22	Jhansi ...	41	41	1,323	1,323	1,062	982	1,212	970	1,3
23	Jalaun ...	18	18	841	841	583	580	626	429	4
24	Hamirpur ...	24	24	738	680	815	686	725	533	7
25	Banda ...	26	26	1,183	976	1,183	1,070	950	709	1,0
BENARES DIVISION.										
26	Benares...	19	19	1,979	614	1,099	1,083	1,016	1,117	1,4
27	Mirzapur ...	24	24	2,972	1,725	1,009	1,263	1,010	1,088	9
28	Jaunpur...	22	22	3,134	1,935	1,621	1,303	1,127	1,216	9
29	Ghazipur ...	23	23	2,562	2,388	1,236	993	1,018	1,082	9
30	Ballia ...	21	21	1,925	832	843	664	601	588	6
GORAKHPUR DIVISION.										
31	Gorakhpur ...	46	46	7,595	6,821	3,145	2,479	2,260	2,230	2,8
32	Basti ...	25	25	6,962	4,848	1,906	1,670	1,948	2,425	2,8
33	Azamgarh ...	33	33	4,814	4,063	2,112	1,559	1,379	1,961	2,3
KUMAUN DIVISION.										
34	Naini Tal ...	20	20	1,549	1,472	742	483	487	583	8
35	Almora ...	6	6	5,082	2,597	552	460	625	692	1,4
36	Garhwal...	15	15	3,251	2,512	521	448	502	464	1,0
LUCKNOW DIVISION.										
37	Lucknow ...	16	16	934	534	642	550	640	739	9
38	Unao ...	19	19	1,688	1,630	1,367	1,186	952	1,072	1,0
39	Rae Bareli ...	14	14	1,748	1,244	1,036	1,015	903	827	1,0
40	Sitapur ...	23	23	2,332	2,332	1,505	1,143	1,140	1,149	1,7
41	Hardoi ...	26	26	1,897	1,897	1,088	1,195	1,153	1,111	1,3
42	Kheri ...	16	16	1,730	781	1,304	956	935	1,137	1,4
FYZABAD DIVISION.										
43	Fyzabad...	23	23	2,706	2,706	979	970	1,021	1,046	1,2
44	Gonda ...	25	25	2,762	2,762	1,071	759	844	1,124	1,0
45	Bahraich ...	19	19	1,979	1,520	1,238	1,055	1,078	1,275	1,0
46	Sultanpur ...	14	14	2,490	1,779	1,046	927	1,276	1,315	1,8
47	Partabgarh ...	17	17	2,190	1,781	898	819	960	924	1,2
48	Bara Banki ...	23	22	2,070	1,594	966	833	969	1,071	1,4
Total for the Province		1,190	1,182	104,459	82,688	63,230	51,907	52,230	54,695	67,064



RM No. IX.

Provinces during each month of the year 1923.

Province.							6			7			8	9
	July.	August.	September.	October.	November.	December.	Total.			Ratio of deaths per 1,000 of population			Mean ratio per 1,000 of previous five years.	Number.
							Male.	Female.	Total.	Male.	Female.	Total.		
143	260	200	261	352	348	238	1,532	1,399	2,931	11.95	16.64	13.81	22.21	1
57	1,217	1,377	2,394	3,366	2,827	2,052	11,718	10,781	22,499	22.71	25.57	24.00	40.63	2
14	1,194	989	1,120	1,588	1,469	1,532	7,223	6,377	13,600	16.63	17.71	17.12	33.42	3
702	2,904	1,998	2,753	3,567	2,484	3,405	15,762	14,399	30,161	19.46	20.89	20.12	36.68	4
705	2,726	1,924	2,712	3,827	2,513	3,392	15,622	14,775	30,397	27.77	29.32	28.50	43.94	5
17	1,650	1,283	1,986	2,143	2,207	2,087	11,103	9,731	20,834	19.30	20.01	19.62	42.68	6
28	601	585	872	999	999	699	5,255	4,237	9,492	15.40	15.24	15.33	40.09	7
32	1,247	969	1,708	1,435	1,300	1,211	8,785	7,708	16,493	17.28	18.53	17.85	46.83	8
71	1,148	883	921	1,008	930	1,353	7,439	5,704	13,143	18.06	16.97	17.57	37.61	9
363	885	857	1,011	1,448	1,112	1,304	7,271	5,757	13,028	16.19	15.13	15.70	38.37	10
675	1,355	1,566	1,194	2,451	2,073	1,338	10,934	8,908	19,842	20.07	18.99	19.57	45.62	11
417	1,068	760	988	1,501	1,459	1,485	7,226	6,343	13,569	18.54	18.09	18.33	49.56	12
553	1,505	1,428	1,880	2,226	1,923	1,972	11,854	9,444	21,298	22.46	21.10	21.84	46.69	13
557	2,066	1,771	2,456	3,394	2,615	2,785	14,265	12,429	26,694	22.32	22.21	22.27	51.26	14
496	1,257	1,303	1,268	1,805	1,511	1,441	9,058	7,832	16,890	20.00	20.27	20.13	46.06	15
807	589	609	699	865	1,037	1,020	4,787	4,101	8,888	20.89	20.25	20.59	46.10	16
486	1,623	1,304	1,347	1,758	1,576	2,126	11,173	9,249	20,422	23.82	23.86	23.84	48.73	17
412	909	791	748	1,035	1,217	1,008	7,084	5,511	12,595	17.52	16.74	17.17	42.58	18
214	1,529	1,274	1,309	1,472	1,501	1,653	11,079	8,613	19,692	17.38	16.84	17.14	35.46	19
886	691	514	539	662	601	764	4,794	3,861	8,655	14.04	12.42	13.27	35.48	20
3.8	1,604	1,490	1,733	1,937	2,070	1,881	11,998	9,819	21,817	16.61	14.39	15.53	32.79	21
662	1,268	1,203	1,494	1,943	1,728	1,287	8,938	7,670	16,608	18.32	26.36	27.38	40.70	22
793	648	754	649	691	858	810	4,366	3,552	7,918	20.46	18.49	19.53	33.80	23
488	1,111	877	1,276	1,685	1,237	919	6,501	5,583	12,089	28.97	25.89	27.46	42.75	24
558	1,035	796	954	1,169	1,202	1,157	7,062	5,763	12,825	22.51	19.24	20.92	37.45	25
842	1,186	1,479	1,771	1,951	1,670	1,460	9,098	8,062	17,160	19.70	18.34	19.04	33.13	26
686	1,418	1,246	1,304	1,302	1,536	1,499	8,410	6,897	15,307	23.25	19.02	21.14	34.34	27
402	1,236	1,134	1,293	1,428	1,590	1,684	9,142	6,888	16,030	15.91	11.83	13.88	29.68	28
302	1,002	886	1,208	1,381	1,338	1,421	7,527	6,266	13,793	17.72	15.37	16.57	22.96	29
994	883	875	1,368	1,318	906	1,246	6,160	4,797	10,957	14.44	11.86	13.18	22.87	30
733	2,876	2,830	4,161	3,940	3,954	4,146	20,631	16,926	37,557	12.44	10.52	11.50	22.27	31
443	2,302	2,406	1,830	2,679	2,496	2,479	14,447	13,037	27,484	14.67	13.86	14.27	29.12	32
005	1,635	1,820	1,967	2,275	2,281	2,109	12,532	10,906	23,438	16.14	14.49	15.33	32.70	33
812	519	507	455	569	624	659	3,892	3,391	7,283	24.20	29.21	26.30	41.34	34
823	1,358	1,450	921	981	774	683	5,983	5,773	11,756	22.55	21.78	22.17	31.09	35
137	1,124	972	756	918	496	519	4,368	4,502	8,870	18.76	17.84	18.28	30.46	36
164	701	751	750	678	686	682	4,803	4,105	8,908	12.23	12.37	12.30	30.81	37
280	1,003	824	777	1,009	962	1,213	7,110	5,602	12,712	16.40	14.53	15.52	41.83	38
990	1,007	652	608	750	908	816	5,867	4,733	10,600	12.36	10.25	11.32	36.21	39
981	1,749	1,446	1,423	1,543	1,566	1,600	9,651	8,348	17,999	16.59	16.44	16.52	42.80	40
611	1,151	1,159	1,235	1,709	1,633	1,825	9,411	7,422	16,833	16.05	14.90	15.52	41.09	41
376	1,603	1,238	1,286	1,431	1,698	1,619	8,842	7,216	16,058	18.22	16.85	17.58	39.56	42
272	1,200	1,150	1,468	1,191	1,340	1,466	7,788	6,547	14,335	13.23	11.22	12.23	31.86	43
449	1,487	1,352	1,463	1,613	1,498	1,486	8,467	6,773	15,240	11.24	9.40	10.34	27.72	44
716	1,423	1,360	1,445	1,606	1,756	1,833	9,292	7,583	16,875	16.75	14.84	15.84	34.27	45
746	1,221	1,375	1,343	1,761	2,057	1,814	9,505	8,194	17,699	19.22	16.09	17.63	41.09	46
394	1,074	1,119	1,038	1,504	1,817	1,719	7,843	6,652	14,495	18.79	15.19	16.95	35.66	47
060	1,733	1,363	1,618	1,374	1,312	1,526	8,919	7,361	16,280	16.61	14.93	15.81	39.13	48
922	63,071	56,904	65,828	79,058	73,704	74,423	422,517	357,532	780,049	17.76	16.56	17.19	36.65	49



Paragraph 49 ]

ANNUAL

Deaths registered from **dysentery and diarrhoea** in the districts

1	2	3		4						
Number.	District.	Circles of registration.		Villages.		January.	February.	March.	April.	May.
		Number in each district.	Number from which deaths from dysentery and diarrhoea were reported.	Number in each district.	Number from which deaths from dysentery and diarrhoea were reported.					
MEERUT DIVISION.										
1	Dehra Dun ...	13	9	466	18	11	7	13	10	26
2	Saharanpur ...	30	14	1,618	15	9	6	10	24	30
3	Muzaffarnagar ...	26	6	917	6	1	1	1	4	2
4	Meerut ...	45	20	1,331	27	10	7	11	21	58
5	Balandshahr ...	35	11	1,514	11	9	2	2	5	17
AGRA DIVISION.										
6	Aligarh ...	35	14	1,722	15	26	24	49	50	87
7	Muttra ...	31	12	838	12	24	11	12	17	18
8	Agra ...	37	12	1,195	13	15	8	13	21	25
9	Mainpuri ...	22	2	1,377	3	2	...	1	...	...
10	Etah ...	29	15	1,518	18	6	3	6	11	18
ROHILKHAND DIVISION.										
11	Bareilly ...	32	17	1,953	23	10	2	8	26	13
12	Bijnor ...	31	14	2,075	17	6	5	5	17	21
13	Budaun ...	27	12	1,845	17	8	4	9	14	11
14	Moradabad ...	32	17	2,487	26	15	13	21	48	49
15	Shahjahanpur ...	23	6	2,050	6	21	2	6	2	2
16	Pilibhit ...	14	2	1,058	2	4	3	...	2	7
ALLAHABAD DIVISION.										
17	Farrukhabad ...	24	9	1,672	9	15	1	16	12	20
18	Etawah ...	25	4	1,476	4	7	4	6	7	13
19	Cawnpore ...	28	11	1,982	11	10	14	37	55	116
20	Fatehpur ...	16	3	1,384	3	1	...	...	1	...
21	Allahabad ...	37	8	3,525	13	19	13	22	21	11
JHANSI DIVISION.										
22	Jhansi ...	41	19	1,323	36	9	6	9	9	10
23	Jalaun ...	18	6	841	6	3	1	3	1	2
24	Hamirpur ...	24	6	758	6	1	1	4	2	3
25	Banda ...	26	8	1,183	8	2	6	3	2	4
BENARES DIVISION.										
26	Benares ...	19	3	1,979	6	42	36	65	76	62
27	Mirzapur ...	24	7	2,972	7	3	4	7	14	11
28	Jauipur ...	22	5	3,134	6	14	14	13	8	9
29	Ghazipur ...	23	1	2,563	1	...	...	1	1	3
30	Ballia ...	21	16	1,925	41	26	20	11	32	28
GORAKHPUR DIVISION.										
31	Gorakhpur ...	46	26	7,595	45	4	10	8	11	8
32	Basti ...	25	9	6,962	16	1	2	1	2	4
33	Azamgarh ...	33	21	4,814	54	8	6	11	14	11
KUMAUN DIVISION.										
34	Naini Tal ...	20	12	1,549	48	3	5	5	19	19
35	Almora ...	6	6	5,082	311	42	42	46	57	141
36	Garhwal ...	15	13	3,251	466	76	89	61	98	227
LUCKNOW DIVISION.										
37	Lucknow ...	16	7	934	8	35	27	36	56	76
38	Unao ...	19	6	1,688	6	2	2	2	5	...
39	Rae Bareilly ...	14	6	1,748	10	4	5	7	3	8
40	Sitapur ...	23	8	2,332	8	4	5	11	14	26
41	Hardoi ...	26	11	1,897	11	7	5	3	5	9
42	Kheri ...	16	4	1,730	4	1	...	1	1	1
FYZABAD DIVISION.										
43	Fyzabad ...	23	9	2,706	9	13	11	7	13	23
44	Gonda ...	25	7	2,762	7	6	2	3	2	6
45	Bahraich ...	19	3	1,979	3	1	2	7	6	7
46	Sultanpur ...	14	1	2,490	1	...	...	...	2	...
47	Partabgarh ...	17	7	2,190	8	...	1	1	4	...
48	Bara Bakki ...	23	5	2,070	5	4	2	1	5	7
Total for the Province...		1,190	450	104,459	1,406	540	434	575	830	2,249



FORM NO. X.

of the United Provinces during each month of the year 1923.

5							6			7			8	9
June.	July.	August.	September.	October.	November.	December.	Total.			Ratio of deaths per 1,000 of population.			Mean ratio per 1,000 of previous five years.	Number.
							Male	Female.	Total.	Male.	Female.	Total.		
25	28	8	15	21	21	10	114	81	195	·89	·96	·92	1·30	1
20	21	19	60	58	25	29	194	117	311	·38	·28	·33	·39	2
2	1	1	8	4	3	2	17	13	30	·04	·04	·04	·06	3
40	25	59	64	66	35	20	201	215	416	·25	·31	·28	·38	4
18	6	22	16	21	19	11	75	73	148	·13	·14	·14	·14	5
78	50	71	129	84	32	59	375	364	739	·65	·75	·70	·56	6
35	14	27	45	21	18	11	138	115	253	·40	·41	·41	·50	7
39	15	23	90	54	30	22	191	164	355	·37	·39	·38	·56	8
...	...	...	...	...	...	...	1	2	3	...	...	...	·03	9
28	11	18	51	21	18	21	110	102	212	·24	·27	·25	·19	10
14	9	24	22	22	18	5	90	83	173	·16	·18	·17	·25	11
7	15	17	25	22	23	14	99	78	177	·25	·22	·24	·52	12
10	6	10	24	15	11	2	67	57	124	·13	·13	·13	·18	13
47	25	59	99	78	53	40	304	243	547	·47	·43	·46	·63	14
21	18	18	37	24	14	9	97	77	174	·21	·20	·21	·23	15
15	4	7	8	14	6	8	50	28	78	·22	·14	·18	·24	16
14	13	25	28	30	20	26	115	105	220	·24	·27	·26	·39	17
10	5	13	22	28	15	10	80	60	140	·20	·18	·19	·23	18
62	36	54	40	18	25	18	264	221	485	·41	·43	·42	·37	19
...	...	...	...	1	2	...	3	2	5	·01	·01	·01	·07	20
23	6	45	47	37	21	32	173	124	297	·24	·18	·21	·32	21
14	15	31	32	50	34	21	124	116	240	·39	·40	·39	·51	22
3	3	5	9	12	8	4	22	32	54	·10	·17	·13	·25	23
2	6	5	9	11	8	1	22	31	53	·10	·14	·12	·32	24
3	2	6	4	6	3	3	21	23	44	·07	·08	·07	·09	25
62	60	116	113	95	65	72	431	433	864	·93	·98	·96	1·28	26
5	3	8	15	5	10	11	57	39	96	·16	·11	·13	·28	27
10	5	5	3	8	7	3	51	48	99	·09	·08	·08	·10	28
4	...	2	4	5	6	1	16	11	27	·04	·03	·03	·05	29
27	43	23	18	33	9	12	166	116	282	·39	·29	·34	·49	30
11	3	9	13	20	10	19	75	51	126	·04	·03	·04	·13	31
3	3	1	..	3	1	1	15	7	22	·01	·01	·01	·03	32
14	4	25	22	23	16	20	112	62	174	·14	·08	·11	·26	33
22	19	18	12	7	4	7	76	64	140	·47	·55	·50	·68	34
154	95	65	22	33	26	28	346	405	751	1·30	1·53	1·42	2·25	35
251	242	193	108	97	59	86	797	790	1,587	3·42	3·13	3·27	4·88	36
65	39	71	58	36	52	52	311	292	603	·79	·88	·83	1·46	37
2	..	2	2	2	4	1	17	7	24	·04	·02	·03	·09	38
1	2	3	5	2	2	5	27	20	47	·06	·04	·05	·11	39
11	7	9	15	4	13	8	53	74	127	·09	·14	·12	·13	40
7	8	12	13	8	4	8	47	42	89	·08	·8	·08	·17	41
1	...	1	...	...	...	...	4	2	6	·01	...	·01	·02	42
10	12	15	13	17	27	18	105	74	179	·18	·13	·15	·30	43
6	4	7	2	2	...	...	24	16	40	·03	·02	·03	·07	44
8	6	7	3	6	1	4	35	23	58	·06	·04	·05	·05	45
2	...	1	1	...	...	1	6	1	7	·01	...	·01	·05	46
...	...	3	1	1	1	...	10	2	12	·02	...	·01	·07	47
6	3	2	7	4	...	4	28	17	45	·05	·03	·04	·11	48
1,212	892	1,165	1,334	1,129	779	739	5,756	5,122	10,878	·24	·24	·24	·35	



Deaths registered from **respiratory diseases** in the districts

1	2	3		4		5					
Number.	District.	Circles of registration.		Villages.		January.	February.	March.	April.	May.	June.
		Number in each district.	Number from which deaths from respiratory diseases were reported.	Number in each district.	Number from which deaths from respiratory diseases were reported.						
MEERUT DIVISION.											
1	Dehra Dun ...	13	10	466	18	22	25	27	45	37	34
2	Saharanpur ...	30	19	1,618	22	49	30	36	29	21	33
3	Muzaffarnagar ...	26	10	917	12	5	4	3	5	1	2
4	Meerut ...	45	23	1,331	44	116	112	107	130	110	83
5	Bulandshahr ...	35	4	1,514	4	19	16	23	12	17	12
AGRA DIVISION.											
6	Aligarh ...	35	15	1,722	16	44	43	56	43	67	51
7	Muttra ...	31	5	838	5	45	21	54	53	50	71
8	Agra ...	37	13	1,195	19	171	150	163	182	188	156
9	Mainpuri ...	22	10	1,377	10	1	3	1	1	3	...
10	Etah ...	29	17	1,518	21	23	17	11	14	8	15
ROHILKHAND DIVISION.											
11	Bareilly ...	32	18	1,953	21	81	46	63	67	61	60
12	Bijnor ...	31	14	2,075	17	14	24	18	19	7	7
13	Budaun ...	27	17	1,845	28	28	13	4	8	6	5
14	Moradabad ...	32	17	2,487	20	110	99	92	103	82	59
15	Shahjahanpur ...	23	10	2,050	19	57	56	49	52	37	78
16	Pilibhit ...	14	7	1,058	7	34	21	20	41	30	32
ALLAHABAD DIVISION.											
17	Farrukhabad ...	24	11	1,672	11	76	54	68	70	78	41
18	Etawah ...	25	7	1,476	7	20	23	19	25	47	39
19	Cawnpore ...	28	11	1,982	11	190	124	163	247	422	353
20	Fatehpur ...	16	5	1,384	6	5	1	3	1	...	...
21	Allahabad ...	37	13	3,525	21	139	80	114	126	141	134
JHANSI DIVISION.											
22	Jhansi ...	41	22	1,323	59	36	38	45	33	22	44
23	Jalaun ...	18	5	841	5	20	17	20	15	21	27
24	Hamirpur ...	24	22	758	565	281	236	179	205	188	404
25	Banda ...	26	11	1,183	11	5	9	10	10	15	6
BENARES DIVISION.											
26	Benares ...	19	7	1,979	17	185	135	203	212	176	165
27	Mirzapur ...	24	9	2,972	10	8	12	10	11	9	11
28	Jaunpur ...	22	8	3,134	9	3	2	5	5	10	14
29	Ghazipur ...	23	9	2,562	9	4	7	5	4	2	3
30	Ballia ...	21	12	1,925	14	2	6	1	2	3	3
GORAKHPUR DIVISION.											
31	Gorakhpur ...	46	23	7,595	60	30	45	31	30	26	21
32	Basti ...	25	5	6,962	9	1	1	...	...	...	1
33	Azamgarh ...	33	10	4,814	34	16	11	11	13	5	11
KUMAUN DIVISION.											
34	Naini Tal ...	20	14	1,549	52	19	21	23	28	41	34
35	Almora ...	6	6	5,082	188	54	38	67	45	37	62
36	Garhwal ...	15	14	3,251	68	38	44	32	24	30	15
LUCKNOW DIVISION.											
37	Lucknow ...	16	8	934	10	226	191	229	216	269	276
38	Unao ...	19	5	1,688	7	8	5	9	11	3	3
39	Rae Bareli ...	14	3	1,748	5	1	4	2	2	8	3
40	Sitapur ...	23	8	2,332	8	4	5	14	9	12	8
41	Hardoi ...	26	16	1,897	16	20	4	9	8	7	3
42	Kheri ...	16	4	1,730	4	...	1	3	...	1	1
FYZABAD DIVISION.											
43	Fyzabad ...	23	10	2,706	11	41	28	79	44	26	17
44	Gonda ...	25	5	2,762	5	9	5	8	6	5	5
45	Bahraich ...	19	3	1,979	3	5	4	4	3	3	4
46	Sultanpur ...	14	2	2,490	2	7	4	6	7	4	1
47	Partabgarh ...	17	8	2,190	11	5	2	3	6	4	5
48	Bara Banki ...	23	3	2,070	3	8	3	6	5	6	3
Total for the Province		1,190	508	104,459	1,534	2,285	1,840	2,108	2,227	2,346	2,415



## FORM NO. XI.

of the United Provinces during each month of the year 1923.

July.	August.	September.	October.	November.	December.	6			7			8	9
						Total.			Ratio of deaths per 1,000 of population.			Mean ratio per 1,000 of previous years.	Number.
						Male.	Female.	Total.	Male.	Female.	Total.		
31	27	32	23	55	31	232	157	389	1.81	1.87	1.83	2.03	1
16	17	23	30	30	31	180	165	345	.35	.39	.37	.62	2
2	1	3	1	3	...	23	7	30	.05	.02	.04	.08	3
71	66	60	89	123	124	509	682	1,191	.63	.99	.79	.94	4
7	8	5	11	16	22	109	59	168	.19	.12	.16	.21	5
17	33	40	33	19	37	232	251	483	.40	.52	.45	.57	6
29	46	42	66	67	45	291	298	589	.85	1.07	.95	.74	7
109	117	167	117	148	189	955	882	1,837	1.88	2.12	1.99	1.95	8
...	..	6	3	5	...	16	7	23	.04	.02	.03	.03	9
14	15	6	8	27	15	112	61	173	.25	.16	.21	.28	10
47	46	54	40	43	39	307	340	647	.56	.72	.64	.70	11
18	28	1	8	12	10	95	71	166	.24	.20	.22	.26	12
3	5	8	19	21	17	84	53	137	.16	.12	.14	.17	13
51	72	83	90	116	147	566	538	1,104	.88	.96	.92	.95	14
65	68	65	87	51	57	383	339	722	.84	.88	.86	.61	15
22	49	40	40	36	41	246	160	406	1.07	.79	.94	.42	16
39	61	54	58	47	76	374	348	722	.80	.89	.84	.92	17
15	21	17	30	31	34	158	163	321	.39	.49	.44	.47	18
151	169	150	197	203	232	1,333	1,268	2,601	2.09	2.48	2.26	1.58	19
2	..	..	2	1	..	11	4	15	.03	.01	.02	.07	20
86	77	94	100	94	95	631	649	1,280	.87	.95	.91	1.12	21
42	34	52	60	33	40	287	192	479	.91	.66	.79	.76	22
10	35	47	48	36	33	204	125	329	.95	.65	.81	1.17	23
355	342	562	650	467	373	2,339	1,903	4,242	10.42	8.82	9.63	9.30	24
4	10	7	12	6	17	76	35	111	.24	.12	.18	.16	25
160	211	182	147	164	133	1,088	985	2,073	2.36	2.24	2.30	2.64	26
5	3	11	10	8	14	76	36	112	.21	.10	.15	.20	27
10	6	10	8	12	5	56	34	90	.10	.06	.08	.06	28
5	1	4	1	5	11	29	23	52	.07	.06	.06	.07	29
6	9	3	2	3	...	21	19	40	.05	.05	.05	.07	30
18	41	30	28	36	45	202	179	381	.12	.11	.12	.16	31
3	...	2	..	1	1	5	5	10	...	...	..	.03	32
14	8	11	15	15	17	91	56	147	.12	.07	.10	.17	33
22	22	26	22	22	31	180	131	311	1.12	1.13	1.12	1.09	34
41	36	38	25	32	40	286	229	515	1.08	.86	.97	1.48	35
16	14	17	17	9	26	197	85	282	.85	.34	.58	.75	36
187	206	183	186	225	241	1,277	1,358	2,635	3.25	4.09	3.64	4.43	37
...	2	..	2	1	1	25	20	45	.06	.05	.05	.13	38
1	2	2	1	2	1	22	7	29	.05	.01	.03	.08	39
4	7	4	5	9	8	54	35	89	.09	.07	.08	.54	40
6	8	3	4	6	13	63	28	91	.11	.06	.08	.13	41
1	...	...	2	...	..	4	5	9	.01	.01	.01	.02	42
14	12	31	37	28	22	193	186	379	.33	.32	.32	.44	43
4	6	9	12	5	3	49	28	77	.06	.04	.05	.08	44
10	8	4	4	6	5	43	17	60	.08	.03	.06	.05	45
3	10	10	2	8	11	38	35	73	.08	.07	.07	.06	46
1	5	7	3	8	1	32	18	50	.03	.04	.06	.12	47
1	...	3	3	4	6	27	21	48	.05	.04	.05	.15	48
1,738	1,964	2,208	2,358	2,299	2,340	13,811	12,297	26,108	.58	.57	.57	.63	



Deaths registered from **Plague** in the districts

1	2	3		4						
Number.	District.	Circles of registration.		Villages.		January.	February.	March.	April.	May.
		Number in each district.	Number from which deaths from plague were reported.	Number in each district.	Number from which deaths from plague were reported.					
MEERUT DIVISION.										
1	Dehra Dun ...	13	1	466	1	...	...	...	1	...
2	Saharanpur ...	30	2	1,618	2	...	...	2	1	...
3	Muzaffarnagar ...	26	4	917	7	...	5	50	147	27
4	Meerut ...	45	19	1,331	82	9	132	654	1,077	607
5	Bulandshahr ...	35	13	1,514	22	...	17	47	210	190
AGRA DIVISION.										
6	Aligarh ...	35	4	1,722	11	...	...	17	99	17
7	Muttra ...	31	3	838	3	...	...	7	1	...
8	Agra ...	37	4	1,195	6	...	...	11	3	...
9	Mainpuri ...	22	1	1,377	1	...	...	...	...	...
10	Etah ...	29	2	1,518	2	...	...	...	1	1
ROHILKHAND DIVISION.										
11	Bareilly ...	32	1	1,953	1	...	...	1	2	...
12	Bijnor ...	31	...	2,075	...	...	...	...	...	...
13	Budaun ...	27	1	1,845	1	...	...	...	5	...
14	Moradabad ...	32	1	2,487	1	...	...	1	...	...
15	Shahjahanpur ..	23	1	2 050	30	29	72	102	36	6
16	Pilibhit ...	14	4	1,058	6	35	26	35	4	...
ALLAHABAD DIVISION.										
17	Farrukhabad ...	24	3	1,672	9	...	1	20	16	1
18	Etawah ...	25	2	1,476	2	...	...	1	1	...
19	Cawnpore ...	28	21	1,982	173	385	715	898	671	127
20	Fatehpur ...	16	11	1,384	66	332	441	416	207	19
21	Allahabad ...	37	11	3,525	95	109	188	207	126	68
JHANSI DIVISION.										
22	Jhansi ...	41	4	1,323	7	41	17	37	4	..
23	Jalaun ...	18	1	841	1	...	...	1	...	...
24	Hamirpur ...	24	4	758	9	1	8	63	23	...
25	Banda ...	26	7	1,183	16	88	184	303	62	...
BENARES DIVISION.										
26	Benares ...	19	13	1,979	175	380	303	813	330	50
27	Mirzapur ...	24	3	2,972	3	...	...	4	23	...
28	Jaunpur ...	22	10	3,134	55	91	150	264	465	78
29	Ghazipur ...	23	20	2,562	233	499	818	1,863	1,470	207
30	Ballia ...	21	21	1,925	513	798	2,143	1,897	1,657	237
GORAKHPUR DIVISION.										
31	Gorakhpur ...	46	30	7,595	1,100	1,076	1,844	3,684	1,896	187
32	Basti ...	25	22	6,962	690	1,605	2,675	3,321	914	224
33	Azamgarh ...	33	32	4,814	1,273	3,489	5,703	8,687	2,841	118
KUMAUN DIVISION.										
34	Naini Tal ...	20	...	1,549	...	...	...	...	...	...
35	Almora ...	6	...	5,082	...	...	...	...	...	...
36	Garhwal ...	15	...	3,251	...	...	...	...	...	...
LUCKNOW DIVISION.										
37	Lucknow ...	16	2	934	2	...	3	17	16	4
38	Unao ...	19	13	1,688	94	177	277	513	241	57
39	Rae Bareli ...	14	5	1,748	23	2	9	45	33	2
40	Sitapur ...	23	8	2,332	20	40	91	236	126	15
41	Hardoi ...	26	2	1,897	2	...	...	2	...	..
42	Kheri ...	16	1	1,730	1	...	1	...	...	...
FYZABAD DIVISION.										
43	Fyzabad ...	23	22	2,706	187	616	938	1,353	763	60
44	Gonda ...	25	8	2,762	34	3	84	96	53	7
45	Bahraich ...	19	1	1,979	14	91	90	65	14	...
46	Sultanpur ...	14	3	2,490	23	38	49	82	42	1
47	Partabgarh ...	17	1	2,190	1	...	...	...	1	...
48	Bara Banki ...	23	8	2,070	38	58	81	366	250	41
Total for the province...		1,190	350	104,459	5,035	9,992	17,065	26,181	13,832	2,351



## FORM NO. XII.

of the United Provinces during each month of the year 1923.

5							6			7			8	9
June.	July.	August.	Sept mber.	October.	November.	December.	Total.			Ratio of deaths per 1,000 of population.			Mean ratio per 1,000 of previous five years.	Number.
							Male.	Female.	Total.	Male.	Female.	Total.		
...	...	...	...	...	...	...	1	...	1	·01	...	...	...	1
...	...	...	...	...	...	...	2	1	3	...	...	...	·09	2
1	...	...	...	...	...	...	99	131	230	·23	·36	·29	·20	3
136	13	6	5	20	67	313	1,393	1,646	3,039	1·72	2·39	2·03	·24	4
60	...	...	...	21	94	272	427	484	911	·76	·96	·85	·42	5
4	...	...	...	...	...	...	62	75	137	·11	·15	·13	·62	6
...	...	...	...	...	16	20	22	22	44	·06	·08	·07	·35	7
...	...	...	...	...	...	...	5	9	14	·01	·02	·01	·35	8
2	...	...	...	...	...	...	1	1	2	..	..	...	·69	9
...	...	...	...	...	...	...	1	1	2	...	...	...	·15	10
...	...	...	...	...	...	...	2	1	3	...	...	...	·05	11
...	...	...	...	...	...	...	...	...	...	...	...	...	·21	12
...	...	...	...	...	...	...	5	...	5	·01	...	...	·02	13
...	...	...	...	...	...	1	2	...	2	...	...	...	·33	14
...	...	...	...	...	...	...	103	142	245	·23	·37	·29	·01	15
...	...	...	...	...	...	4	60	44	104	·26	·22	·24	·23	16
...	...	...	...	...	...	31	33	36	69	·07	·09	·08	·87	17
...	...	...	...	...	...	...	2	...	2	...	...	...	·47	18
39	...	3	...	67	42	97	1,502	1,542	3,044	2·36	3·01	2·65	1·85	19
...	...	...	...	...	32	78	691	834	1,525	2·02	2·68	2·34	1·15	20
...	...	...	...	131	24	48	448	453	901	·62	·66	·64	1·64	21
...	...	...	...	...	...	...	44	55	99	·14	·19	·16	·39	22
...	...	...	...	...	...	...	1	...	1	...	...	...	1·49	23
...	...	...	...	2	2	25	51	73	124	·23	·34	·28	·08	24
...	...	14	81	170	100	29	447	584	1,031	1·42	1·95	1·68	·12	25
...	...	24	8	5	35	32	1,033	947	1,980	2·24	2·15	2·19	·99	26
...	...	...	...	...	...	...	8	19	27	·02	·05	·04	·71	27
9	7	10	...	31	...	9	500	614	1,114	·87	1·06	·96	2·56	28
24	2	9	8	19	32	137	2,380	2,708	5,088	5·60	6·64	6·11	5·26	29
40	10	3	9	...	48	173	3,195	3,820	7,015	7·49	9·44	8·44	7·13	30
9	7	...	37	37	213	291	3,973	5,308	9,281	2·39	3·30	2·84	1·90	31
24	...	11	2	18	143	214	4,097	5,054	9,151	4·16	5·37	4·75	2·13	32
8	...	13	8	...	53	307	9,668	11,559	21,227	12·45	15·36	13·89	5·10	33
...	...	...	...	...	...	...	...	...	...	...	...	...	·01	34
...	...	...	...	...	...	...	...	...	...	...	...	...	...	35
...	...	...	...	...	...	...	...	...	...	...	...	...	...	36
...	...	...	...	...	...	...	22	18	40	·06	·05	·05	·76	37
3	...	...	...	...	9	48	625	700	1,325	1·44	1·81	1·62	2·21	38
...	...	...	...	...	34	51	74	102	176	·15	·22	·19	1·25	39
...	...	...	...	...	16	59	256	327	583	·44	·64	·53	·50	40
...	...	...	...	...	...	...	1	1	2	...	...	...	·48	41
...	...	...	...	...	...	...	...	1	1	...	...	...	·04	42
...	...	...	12	12	59	158	1,771	2,200	3,971	3·01	3·77	3·39	·81	43
...	...	...	...	...	6	41	143	147	290	·19	·20	·20	·53	44
...	...	...	1	...	...	14	127	148	275	·23	·29	·26	·05	45
...	...	...	...	...	29	19	107	153	260	·22	·30	·26	·70	46
...	...	...	...	...	...	...	1	...	1	...	...	...	·79	47
...	...	...	...	...	11	35	338	504	842	·63	1·02	·82	·79	48
359	39	93	171	533	1,065	2,506	33,723	40,464	74,187	1·42	1·87	1·63	1·13	



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# ORDERS OF GOVERNMENT.

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No. 288/XVI--77.

PUBLIC HEALTH DEPARTMENT.

*Dated Allahabad, the 14th October, 1924.*

## RESOLUTION.

READ—

The Annual Report of the Director of Public Health, United Provinces, for the year ending 31st December, 1923, and the report of the Superintending Engineer, Public Health department, for the year ending 31st March, 1924.

OBSERVATIONS.—The first paragraph of the Annual Report calls attention once more to the evidence furnished by the last Census Report of the unreliability of the provincial vital statistics. There is reason to believe that about 8 per cent. of the deaths in the province remain unreported. There is probably a similar but smaller deficiency in the reported number of births. In certain areas the failure to return accurate statistics was glaring, as in the Lakhimpur municipality which reported a birth-rate of 9·36 and a death-rate of 6·94 and in Gonda which returned 12·78 as the district death-rate. Lack of correct knowledge of the mere numbers of deaths and births which occur is however of less importance than lack of true information regarding the causes of deaths. Every year the number of deaths classed as due to “fevers,” ranges from three-quarters of a million to nearly two millions. Most of these deaths are attributed in the returns to malaria. It is known that in a very large number of cases this classification is incorrect. But no reliable data exists for deducing even indirectly and to an approximate degree the number of deaths truly attributable to this disease. Knowledge of the mortality caused by several other diseases is almost as incomplete. It is clear that under these circumstances the Public Health department is fighting disease blindfold. Unfortunately the prospect of removing this heavy disability appears remote. An improvement in the record of the mere numbers of births and deaths might conceivably, but at great expense, be effected through the replacement of the village chaukidar by some other agency for the reporting of vital statistics, but no



conceivable agency could ensure even moderately correct reporting of the causes of deaths, particularly in the rural areas.

2. In spite of some recrudescence of plague the year, like the previous year, was markedly healthy, a fact reflected in the birth-rate as well as the death-rate. As usual the municipal birth and death-rates were much higher than the corresponding rural rates. The difference was more than can be accounted for on the assumption that the reporting of vital statistics is more accurate in municipal areas. It is noticeable that the excess of births over deaths was greater in the rural than in the municipal area, but there is no certainty that the difference is real and not apparent merely.

3. Infantile mortality fell from 183·8 to 169·4. The whole of the improvement occurred in the rural area the municipal rate showing an increase of ten per mille. The provincial rate was still high and there is small consolation in the reflection that in most other provinces the rates were even higher. The Cawnpore municipality as usual headed the list with the appalling death-rate of 495·17 per thousand children born. The year witnessed some of the first attempts yet made to work in the wide field which offers everywhere, but particularly in the large towns, for maternity and child welfare work. A provincial branch of the Lady Chelmsford League was established and under its auspices a well planned scheme was launched in Allahabad in July 1923. An independent, earlier and most promising undertaking is the Mrs. Stubbs Maternity and Child Welfare Society at Bareilly. The staff provided by this Society attended 640 delivery cases and treated 239 out-patients at the centre. Fatalities were reduced to 118 deaths of infants and nine deaths of mothers. A small beginning was made by the Cawnpore municipal board which decided to maintain one health visitor and two dais at two maternity centres.

4. Of particular diseases there is little to be said. For the second year in succession the province was almost free from cholera in epidemic form. Small-pox claimed only 747 victims. Deaths from plague rose from 23,291 to 74,187, a figure which exceeded the previous quinquennial average; as usual the disease occurred mainly in the four eastern districts of Ballia, Gorakhpur, Basti and Azamgarh. The deaths attributed to fevers fell from 909,293 to 780,049 or to less than half the quinquennial average.



5. The work of the malaria branch was carried on vigorously under the direction of Major Phillips and his assistants. Thanks to their efforts the working season at the headworks of the Sarda canal was extended by a further two months, a valuable result financially. Malarial surveys in Pilibhit and in the Tarai and Bhabar estates were completed, and statistics of malarial infection were collected in Lucknow, Nagina, Meerut, Saharanpur and Kosi in order to ascertain the results of measures adopted on the recommendation of malaria officers in the past. In all five places a marked improvement was found, the extent depending upon the degree of completeness of the antimalarial measures undertaken. In Saharanpur, where the main measure was the stoppage of irrigation near the town, the splenic index among children was found to have fallen since 1909 from 80 to 7 per cent. The bar on irrigation has now been removed, but unless the municipal board takes energetic measures to prevent the reappearance of mosquito breeding places it may become necessary to re-impose it.

6. The district health scheme, started in the preceding year in Gorakhpur and Basti, was extended to a third district Azamgarh. The main function of the staff was the control of epidemic diseases. Valuable work was also done in supervising vaccination and travelling dispensaries, in checking vital statistics, and in inspecting town areas and villages. With this staff more effective use should be possible of the Village Sanitation Act which in districts where a health staff is working might be more widely applied. The Board of Public Health, as also the local authorities, were favourably impressed with the results achieved in the three districts.

7. A health officer is in most large towns a well-established institution, whose value is to a greater or lesser extent recognised by the board. But out of the 30 municipalities which according to the classification adopted by the Government need a medical officer of health, there were still ten which had not appointed such an officer—namely Moradabad, Jhansi, Mirzapur, Gorakhpur, Chandausi, Jaunpur, Pilibhit, Sitapur, Hapur and Bahraich. The plea usually advanced is that a health officer is a luxury which the board cannot afford. In refuting this argument there is encountered the old difficulty that the results of good health work are negative and can be satisfactorily demonstrated only by health statistics covering long periods before and after the appointment of a



health officer. But such statistics have not been and could not be maintained, and even vital statistics, from which inferences might otherwise be drawn as to the prevalence of disease, are too inaccurate and incomplete to furnish reliable indications. Yet there can, in the opinion of the Government, be no question of the importance of the maintenance of an adequate health staff by the larger towns both in their own interests and for the sake of the surrounding countryside, towards which a town, where health measures are neglected, is in danger of acting as a focus of infection.

8. The Board of Public Health sanctioned grants aggregating Rs. 6,87,035 compared with Rs. 13,54,134 in the previous year. Four lakhs were allotted to water-supply projects, thirteen thousand to drainage and sewerage works, one lakh to rural sanitation, and one and three-quarter lakhs to sanitary objects of a general nature. Of the allotment for rural sanitation notified and town areas received forty-five thousand, district boards twenty-three thousand and village panchayats thirty-two thousand rupees. The last mentioned amount was placed at the disposal of Commissioners for distribution to village panchayats, subject to the conditions that the money should ordinarily be spent on improving drinking wells, filling insanitary pits and effecting minor sanitary improvements and that preference should be given to panchayats contributing towards the cost. These small grants are valuable when profitably utilised, but the system by itself offers no real solution of the problem of improving the health of the rural public. In that matter the hope of the future seems to lie in the extension of the district health scheme.

9. The engineering branch of the Public Health department spent Rs. 21,22,760 on the construction of original works and Rs. 13,87,214 on the maintenance and repair of works already opened. These two items in the previous year totalled Rs. 44,66,066. The cost of the establishment of the branch was reduced from Rs. 4,08,408 to Rs. 3,67,000. The fees earned by the branch amounted only to Rs. 1,30,825. Hence the major portion of the cost of the branch was borne by the Government. Of the more important works in hand, the reorganisation of the Lucknow Water Works was nearing completion. An important section of the work, the rapid filtration plant was finished, tested and found to give excellent results. This type of filter has many advantages over the



old slow sand filter. Satisfactory progress was made with the Fyzabad Water-Supply Scheme and the Lucknow Sewage Disposal Scheme, the latter being almost complete.

Almost equal in importance to the construction and supervision of projects is the work done by the branch in watching the working of municipal drainage works and water-supplies. Municipal drainage works are still in a rudimentary stage and for financial and other reasons many long years must elapse before the most advanced of our cities possesses a sewerage system at all comparable to the arrangements considered indispensable even in small European townships. Unfortunately even where sewers exist, boards do not extract the full value from them. Failure to insist upon private owners making connections with sewers seems general; also, as in the case of the intercepting sewer at Lucknow, a main sewer is sometimes left partly unused for want of subsidiary sewers which might be connected with it at a relatively small cost.

Owing largely to the stimulating advice and criticism offered to boards by the Mechanical Engineer the year witnessed some improvement in one important branch of the administration of municipal water works. The accounts in several municipalities were better kept and collections of current demands as well as of arrears were more complete. This, combined with a drop in the price of coal, reduced the adverse balance in the working of the water-supplies of the province. But a deficit still remained. The only water works which may fairly be held to have paid their way were at Agra. The apparent surplus at Allahabad would have been converted into a slight deficit if the board had not defaulted in the payment of loan instalments, and a similar result would probably have been experienced at Cawnpore if the year's income had not been swollen by the collection of large arrears of water-rate. All other water works were run at a loss.

10. The improvement shown in the collection of dues was very welcome, but the connected problem of the prevention of waste seems again to have received little attention. It must be admitted that here the practical difficulties facing boards are great. Waste occurs almost exclusively through unmetered house connections, the owners of which often leave their taps continuously open either through sheer carelessness



or under the mistaken idea that they are flushing their drains. The ideal of a meter upon every house connection must for a variety of reasons be dismissed as a counsel of impossible perfection, which even in the West is rarely attained. More meters are indeed needed in every town but they must necessarily be limited to the larger connections. There are, however, other methods by which waste could at least be checked. The minimum amount of water tax which gives a title to a house connection might be raised, thus reducing the number of potential points of wastage. An alternative plan is controlled by the block system, in which the distribution system is parcelled out into small areas the supply to each of which is recorded by a meter and can be curtailed to any desired extent if a consumption in excess of reasonable requirements is recorded. Neither plan is perfect, for in both the innocent suffer for others' folly; and both demand in a board the firmness to face some unpopularity with a section of the public. But that section should be small if a board would take the pains to bring home to the tax-payer the obvious facts that water running to waste means money running to waste and that it is from his pocket that the money comes.

11. The operations of the Public Health department were throughout the year ably directed by Lieutenant-Colonel C. L. Dunn in the capacity of Director of Public Health. The post of Superintending Engineer, Public Health department, was held by Mr. G. McC. Hoey, whose annual report affords evidence of keen interest displayed in the discharge of his duties and contains much valuable advice which municipal boards would do well to lay to heart.

ORDER.—Ordered that a copy of this resolution be forwarded to the Director of Public Health and Superintending Engineer, Public Health department, United Provinces, for information.

Ordered also that this resolution be published in the *United Provinces Government Gazette*.

By order of the Governor, acting with His Ministers,

G. B. F. MUIR,

*Secretary to Government, United Provinces.*















